

هكزان الاصل

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THE STRUCTURAL GROUP WITH STRENGTH IN DEPTH

ATCOST

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Industrial revolutions

FAG

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NEWS SUMMARY

GENERAL

Moscow gains U.S. military secrets

Top-secret information on U.S. military aircraft, including the Stealth radar-evading bomber, has almost certainly been acquired by the Soviet Union, the CIA disclosed.

The information was in documents given to a Polish agent by a former employee of the Hughes Aircraft Corporation, convicted of spying last year.

U.S. Defence Secretary Caspar Weinberger ordered the incident's disclosure to tighten security in the scientific and technological fields. Page 3

Public sector pay

Pay rises of about 6 per cent for the armed forces and civil service are expected to be announced shortly. Back Page

BR strike threat

The National Union of Railwaymen threatened strikes if BR went ahead with plans to cut more than 5,000 jobs in 12 engineering workshops. Back Page, Page 8

Salvador killings

Seventeen El Salvador soldiers were killed in a clash with left wing guerrillas near the Honduran border.

Palestinians die

Two Palestinians were killed when Israeli troops fired after trouble in the West Bank towns of Halhoul and Sa'er. Page 4

Syria-PLO pact

Syria and the Palestine Liberation Organisation agreed a common Middle East strategy and outlined conditions for Egypt to return to Arab ranks. Page 4

Iraqis attack

Iraq said its bombers attacked Kharg Island, the main Iranian oil export terminal, and warned all tankers in the area that they are liable to attack.

'Tolerate Pope'

Church of Scotland is urged by one of its own committees to be tolerant towards the Pope's visit there. In Rome, police arrested two youths alleged to have threatened to kill him.

Prostitutes' aid

Programmes to help integrate prostitutes into ordinary working life might qualify for financial aid, EEC Commissioner Ivor Richard said.

Holiday 'war'

Moves by three top tour operators suggest the holiday price war is heightening as company and sales less easy. Page 6

YOPs starters

One in every two youngsters who left school last year started working life on the Youth Opportunities Programme. A higher proportion is likely this year. Page 6

Ganging up

International terrorists are uniting with London criminals to run gangs in Britain's prisons, says Prison Service deputy director Gordon Fowler.

No hiding place

Trees with thin trunks are to be planted in inner Birmingham so that burglars cannot hide behind them.

Briefly . . .

Prince Charles visited Southall, London, scene of race trouble last summer.

Ejorn Berg said he would not play any tennis tournaments until after Wimbledon.

Warrington rugby league club's stadium was wrecked by a fire.

BUSINESS

Equities advance; sharp fall for \$

Equities tended to edge higher, although sentiment was affected by the disappointing figures from ICI. The FT 30-share index closed 6.7 higher at 582.0. Page 31

GLTS advanced, despite fears over the Falklands crisis.

The FT Government Securities index closed 0.16 higher at 67.86. Page 31

DOLLAR fell suddenly to DM 2.335 (DM 2.35), FF 6.1025 (FF 6.139) and Y235.5 (Y237.15).

It rose slightly to SwFr 1.957 (SwFr 1.95). Its index was 113.4 (113.3). Page 38

STERLING closed 90 points higher at \$1.7855 (\$1.7855) and SwFr 3.515 (SwFr 3.485).

But it fell to DM 4.1975 (DM 4.21), FF 10.955 (FF 10.965) and Y423 (Y424). Its trade-weighted index was 89.7 (89.4). Page 38

GOLD fell \$1.5 to \$350.50 in London.

In New York, the Comex May close was \$356.40 (\$355.10). Page 26

WALL STREET was 6.75 lower at 845.89 near the close.

Page 30

LLOYD'S of London is mounting an inquiry to ascertain how insurance brokers and underwriters arranged aviation insurance for Australia's Qantas airline.

OIL RESERVES in the UK meet current British oil demand for over 50 years, according to an official report.

Page 6

EEC INFLATION rate fell to an annualised 11.7 per cent in March from 12 per cent in February.

European statistics office announced.

GRUPO INDUSTRIAL ALFA, Mexico's largest concern, meets its 88 foreign creditors today after suspending principal payments on its \$2.3bn (£1.28bn) debt.

Back Page

PROVISIONS for periodic review of union closed shops should be delayed until after the next election, according to the head of the Engineering Employers' Federation.

Page 9

CHRYSLER, the third largest U.S. motor company, reported a smaller first quarter operating loss than expected of \$89.1m (£49.6m) against \$305m in the first 1981 quarter.

NESTLE group first quarter sales dropped about 6.7 per cent, mainly because of the Swiss franc's high exchange rate.

Page 27

AEROSPATIALE, the French State-owned aerospace group, announced provisional 1981 earnings three to four times up on 1980, FFr 19m (£10.9m).

Page 27

HOOPER reported a reduced pre-tax loss in the first three months to March 31 of £1.9m against a previous £3.4m with reduced sales.

Page 22

GEO WIMPEY pre-tax profit for 1981 declined to £44.2m (£24.9m).

Page 20; Lex, Back Page

MARKS AND SPENCER sales rose 17.4 per cent in the period to March 31 and pre-tax £222m.

Page 20; Lex, Back Page

CHIEF PRICE CHANGES YESTERDAY

(Prices in pence unless otherwise indicated)

RISERS		FALLS	
Anderson Sheldyde	117 + 10	Tube Invs	154 + 4
Avon Rubber	113 + 6	Turner and Newall	68 + 5
Blue Circle	404 + 26	Utd Wire	98 + 5
Boat (H.)	223 + 11	Vickers New	17pm + 4
CEC	385 + 8	Wellbeck Invs	45 + 3
Crucialys	285 + 20	Wimpey (G.)	110 + 5
Hawley	91 + 6	Yarrow	310 + 10
Hoover A	105 + 5	Yule Catto	87 + 5
Hopkings	120 + 8	Candecca	215 + 13
Land Securities	256 + 8	Carlson Capel	192 + 9
Lee Cooper	125 + 8	Marinex	123 + 18
Office & Electronic	425 + 10		
Plessey	397 + 10		
Sainsbury (J.)	650 + 10	Flight Refuelling	263 - 12
Tatmas	540 + 6	ICI	318 - 6
Tomatin	80 + 4	Wadkin	68 - 7

Little basis for optimism on peace moves, says U.S.

BY OUR FOREIGN AND POLITICAL STAFF

THE U.S. said last night that there was "very little basis for optimism" that Britain and Argentina would find a peaceful solution to the Falkland Islands dispute.

One of the gloomiest statements on the crisis yet, was issued on behalf of President Ronald Reagan.

In London Mrs Margaret Thatcher gave a cautious reception to official U.S. peace proposals and went some way to restore a bi-paritisan approach with Labour.

In Buenos Aires the junta wavered uncertainly between agreeing to negotiate on the U.S. peace plan, which would involve a major climbdown, and launching a pre-emptive strike at the Royal Navy task force which is now arriving at the islands.

The White House statement, made by Mr Larry Speakes, the President's Deputy Press secretary, said: "The situation remains very serious."

There had been no movement toward a diplomatic solution. "There is little basis for optimism, but we remain in touch with both parties."

The statement came as Britain prepared to impose a total blockade of the Falklands from noon, London time, today and as Mrs Thatcher was telling the Commons: "We must continue to intensify the pressure."

Mrs Thatcher made clear yesterday that Britain would enforce the total exclusion zone as completely as she has the naval exclusion.

Opening the fourth Commons emergency debate on the Falklands, the Prime Minister declined to give details of the compromise proposals of Mr Alexander Haig, the U.S. Secretary of State.

But she said "the proposals are complex and difficult and the Government is making no formal response until after the Argentines reply."

President Galtieri met a working group of military and civilian advisers yesterday to decide on Argentina's response to the U.S. proposals, amid signs of considerable division over their acceptability.

Pressure for a stated recognition of Argentina's sovereignty over the islands, the basic issue bedevilling the negotiations for the past three weeks, remains the stumbling block.

According to Argentine news agencies, quoting foreign diplomats in Washington, the U.S. proposals are:

- A tripartite administration, involving Britain, Argentina and the U.S. would be set up in the Falklands, to run the islands for an interim period of five years.
- During this period negotiations for full transfer of administration to Argentina would take place according to a predetermined timetable.
- There would be a staggered withdrawal of Argentine troops from the Falklands and a gradual return of the British naval force to base.
- The interests of the islanders, as opposed to their wishes, would be "taken into account" in the discussions on the islands' future.
- There is reported to be no mention in the proposals of

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Gen Alfredo Saint Jean, Argentine Interior Minister, said the proposals contained useful elements and had not been rejected.

"In no way will we accept a Falklands Crisis, Page 4

Callaghan leads unity calls, Page 8

How the Navy secures its signals, Page 10

Bankers freeze in their tracks, Page 19

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"They have to be measured against the principles and objectives expressed so strongly in the debates in the Commons."

The clear implication is that Mrs Thatcher is unenthusiastic about the proposals.

But the Foreign Office appears to take a more favourable view, arguing that despite a number of defects they are in accordance with United Nations Security Council Resolution 502, which called for an Argentine troop withdrawal from the islands and for negotiations.

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Lower ICI profits surprise City

BY SUE CAMERON, CHEMICALS CORRESPONDENT

IMPERIAL CHEMICAL Industries surprised the City yesterday when it announced pre-tax profits for the first quarter of only £62m, which is £52m less than in the final quarter of 1981.

Most forecasters had expected profits for the region of £85m to £90m. ICI admitted last night that the figures were "pretty poor".

The group's share price slumped from 322p to 306p immediately after the announcement of the results, but later rallied to 318p.

Mr John Harvey-Jones, the company's new chairman, warned last week that ICI still saw no signs of a general economic recovery, and yesterday's group figures stressed that there was "no evidence as yet of a sustained upturn."

The £62m pre-tax profit was still £10m up on the profit for the first quarter of 1981.

The company said there were three main reasons for the 43 per cent drop in pre-tax profits to this year's first.

They were:

- Losses in ICI's huge petrochemical and plastics business

are mounting and are thought to have accounted for almost £19m of the £52m drop. Main reasons for the losses are: Western Europe's great over capacity in petrochemicals and plastics, allied to weak prices and pure oil sales fell by 25 per cent, from £263m in fourth-quarter 1981 to £198m; its oil exports in that period went from £40m to £13m; and oil-trading profit was slashed by more than 50 per cent, from £25m to £12m.

The company said its dramatic fall in oil profits resulted from lower crude prices, a higher oil tax bill and the fact that it reduced its oil liftings in the first three months of this year. It saw little hope of a quick end to the world oil surplus, and expected liftings to remain comparatively low, for the rest of the summer at least.

ICI's £141m pre-tax profits in fourth-quarter 1981 were inflated by a £20m benefit from currency exchange rates. Exchange rates have had no significant impact on the latest figures.

The group's worldwide chemical sales were £1,583bn, which is 1 per cent higher than in fourth-quarter 1981 in both overall volume and value terms. But in volume terms sales in overseas markets rose by 2 per cent, while in the UK they fell by 3 per cent.

ICI is still heavily dependent on the UK, despite its long-standing determination to reduce this reliance. It admitted last night: "There is no doubt that the UK is our Achilles' heel."

ICI shares closed at 318p, down 6p on the day.

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Wall St resigned to Budget deadlock

BY PAUL BETTS AND MAX WILKINSON IN LONDON

WALL STREET responded yesterday with resignation rather than despair to Wednesday night's collapse of the U.S. budget compromise negotiations between President Ronald Reagan and Congressional leaders on Capitol Hill.

In the European currency markets the dollar fell yesterday, losing about 11 pence against the D-mark against Wednesday's London close of DM 2.355 and New York close of DM 2.338. It also fell against sterling to close at \$1.796 against Wednesday's London close of \$1.7855.

However, dealers were generally uncertain about the reason for the fall, particularly as Eurodollar interest rates remained firm.

One said the movement against the D-mark may have reflected West Germany's improving trade position as well as a general expectation that U.S. interest rates could fall, rather than being directly related to the U.S. Budget impasse.

Sterling also weakened against the D-mark to close in London at DM 4.1975 against a previous DM 4.21, but the trade-weighted index of its value rose 0.3 points against a basket of other currencies, as measured by the New York, after opening sharply lower. The Dow Jones Blue Chip index recovered some ground by mid session although it was still nearly four points lower on the previous day's close. Bonds, after an initial slump, also rebounded a little. But since Tuesday, when the markets became increasingly preoccupied by a breakdown in the negotiations, long bonds have shed about 11 full points.

Many Wall Street economists said yesterday they never expected a budget compromise because the divisions were so large, with the President showing very little willingness to give up his tax cuts to ease pressures on the federal budget.

But they acknowledged that U.S. chances for early economic uplift weakened.

Money Markets, Page 38

Closed shop review delay urged

BY PHILIP BASSETT, LABOUR CORRESPONDENT

THE GOVERNMENT should postpone plans for periodic reviews of closed shop arrangements until after the next general election, Dr James McFarlane, director general of the Engineering Employers Federation, said yesterday.

Dr McFarlane was speaking at a Financial Times industrial relations conference in London, during which there was growing criticism by employers of key aspects of the closed shop proposals.

The level of unease seems likely to provoke a response on the issue from Mr Norman Tebbit, Employment Secretary, when he addresses the conference today.

The Government has not said yet whether it will invoke the closed shop clauses in the employment legislation in the first or second year after the Act

comes into effect, but Mr Tebbit would almost certainly prefer to have the clause in operation before an election.

Dr McFarlane, though broadly supporting the government's initiative on trade union reform, made clear this serious reservations on two key areas: the Government's plans for periodic reviews of existing closed shops and its tightening of the legal immunities enjoyed by trade unionists.

On the closed shop, he called on the Government to defer implementing the review provisions until after the next general election "so as to reduce the incentive for unions to make general political capital out of particular cases." Unions would not co-operate with ballots on the closed shop, and this could cause industrial relations difficulties in some factories.

Wide backing for move to curb union power, Page 9

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EUROPEAN NEWS

Europe 'falling behind rivals' in high technology

By Giles Merritt in Brussels

THE EUROPEAN Commission says EEC industries are being squeezed increasingly between diminishing market shares in "traditional" areas of manufacturing and a "mediocre" performance in high technology. As a result, Europe is slipping steadily further behind Japan and the U.S.

U.S. official rejects exchange rates action

By John Wyles in Brussels

MR MARC LELAND, Assistant Secretary at the U.S. Treasury, firmly closed the door yesterday to co-operation with Western Europe on reducing volatility in foreign exchange markets.

David Housego finds the car plant at Aulnay-Sous-Bois in a virtual state of siege. Simmering discontent boils over at Citroen

THE CITROEN plant at Aulnay-Sous-Bois on the outskirts of Paris came into full production in 1974 in the first year of M Giscard d'Estaing's presidency.

Illegal aliens to be expelled

ABOUT 40,000 foreigners face expulsion from France after failing to qualify for legal status, M Francois Aulnay, the Secretary of State for Immigrants, said on television yesterday.

At the main staff entrance, now bedecked with red CGT flags, a loudspeaker was blared out Arab music to those in the picket line and to the crowd of sympathisers—a reminder that almost all the workforce are immigrants, predominantly from North Africa but also from Turkey, Spain, Portugal and Yugoslavia.

The 40,000 who face expulsion have been unable to prove reasonable employment or a source of income, the requirement for legal status.

which paved the way for Thursday's strike. Another recent cause of dispute has been the friction provoked by the introduction of the Government-inspired shorter working week.

The claims that the unions are putting forward represent a backlog of past grievances: the freedom of trade unions to organise; an immediate FFR 400 a month increase to supplement basic assembly-line pay of FFR 3,400—to FFR 3,600, which is close to the minimum wage and claimed to be the lowest in the car industry; a slower rhythm of production; an end to racialism; and so on.

The Citroen management, which apparently has substantial independence from its Peugeot parent has so far declined to negotiate.

Minister forecasts rise in Belgian inflation

BRUSSELS—Belgium's partial price freeze will be extended to the end of this year, but a rise in the inflation rate is almost inevitable, according to Mr Willy de Clercq, Finance Minister.

Norwegian union abandons petrol blockade

By Fay Gjester in Oslo

PETROL SUPPLIES returned to normal in most parts of Norway yesterday after the striking sport workers' union abandoned its attempt to block the movement of fuel by non-union drivers.

Savasta recounts career in terrorism

By Rupert Cornwell in Rome

AFTER a fortnight of legal skirmishing and technical recesses, the Moro trial has begun here in earnest, with detailed testimony from Antonia Savasta, the Red Brigades leader who has turned state's witness since his capture in Padua three months ago.

Ecevit remains cool amid the heat and the hailstones

By Metin Munir and James Buchan in Ankara

A VIOLENT hailstorm interrupted the closing stages of yesterday's first session of the trial of Mr Bulent Ecevit, the former Turkish Prime Minister and chairman of the banned centre-left Republican Peoples Party (RPP).

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Robert Graham examines the effects of the Falklands crisis on Spain's foreign policy

AS THE Falklands crisis deepens, the Spanish Government finds itself torn by conflicting pressures and loyalties.

Hispanic past may risk European future

AS THE Falklands crisis deepens, the Spanish Government finds itself torn by conflicting pressures and loyalties.

PEARL RIVER BRIDGE SOY SAUCE THE BEST CONDIMENT PREPARED FROM SOYBEAN RICH IN NUTRITIVE VALUE DELICIOUS IN TASTE

Surly guards

He also quoted Benjamin Franklin to the effect that those who sacrifice freedom for the sake of security deserve neither freedom nor security.

Splinted party

Mr Ecevit, dapper and controlled despite 18 days in the stockade, seems to recognise that his political career is over and that his party has splintered.

General Kenan Evren regards him as a threat, dislikes the Social Democratic twist he gave the RPP and fears his access to public opinion in a Europe the generals, however exasperated, still wish to please.

Afternoon

"Afternoon" chorused the lawyers on their feet. "Morning," said Mr Ecevit. "You should know the workings of the Press by now."

Trade is a less significant factor

Trade is a less significant factor: only 1.5 per cent of all worth \$250m (£142m). Imports from Argentina are worth \$220m. But there is a strong feeling among the older generation of Spaniards and Right-wingers that a great debt of gratitude is owed to Argentina for helping to supply foodstuffs in the early Franco years at a time of Spain's international ostracism.

Mixed with this is the latent popular feeling that anyone who thumbs their nose at the old imperial lion that still controls Gibraltar deserves some support.

Meanwhile, Spain is deeply conscious as "the mother country" of how it will be judged by its Spanish-speaking brothers across the waters.

These domestic pressures have come to the surface over Gibraltar and largely account for the Spanish side's unwillingness to reopen the frontier.

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Mr Leopoldo Calvo Sotelo looking to Europe

religion and close ties created by emigration. In spite of this difference between Spain and the UK an increasing identity of interest has been seen, aided too by the connection between the two Royal families.

When Argentine troops seized the Falklands the Spanish government found itself obliged to dissociate itself from the EEC's solidarity with Britain.

This was the first indication that its declared aims of close identity with its European allies were not so easy in practice. Then, in the Security Council vote, Spain found itself abstaining alongside the Soviet Union in the call for a withdrawal of Argentine troops.

The Spanish officials argue that they had no other option. They felt that to have done any-

thing else could have prejudiced their position on other United Nations resolutions regarding Gibraltar. In this respect it is important to underline that UN resolutions on the Falklands, calling for their de-colonisation, are couched in similar language to those on Gibraltar.

Other considerations must be added to this. There are believed to be some 600,000 Spanish passport holders in Argentina and perhaps 1m Spaniards living there. This is a formidable number of nationals whose interests have to be considered.

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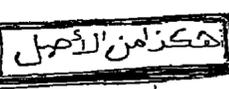
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OVERSEAS NEWS

Britain and France run neck and neck in race for Indian contracts

BY K. K. SHARMA IN NEW DELHI

THE GUYS," said a U.S. special diplomat in New Delhi... "put on their backs their brief cases under about door to door orders from companies..."

In each case, the contract has been won because it had the right kind of financing package: a combination of commercial credits, syndicated by European banks, and governmental grants or cheap credit...

India a major borrower of non-concessional funds abroad. Accompanying the selective opening of the economy to foreign companies and financing, the Government has embarked on a major liberalisation of its economic policies...

despite the alarming rise in India's trade gap (expected to be nearly \$80bn in 1981-82). This is based on the practical consideration that the country's exports cannot increase unless industry is allowed to modernise and thus increase its capacity to compete abroad.

Tunisia and PLO agree strategy

Yasser Arafat and the Palestine Liberation Organisation have agreed on a common strategy for the Middle East... "The PLO groups in the occupied West Bank yesterday agreed that Cairo would be the headquarters of the anti-Israeli demonstration last week."

Israel troops shoot two Palestinians dead in clashes

TWO PALESTINIAN youths were shot dead during clashes with Israeli soldiers on the occupied West Bank yesterday. A third died from wounds received during an anti-Israeli demonstration last week.



Mr Sharon... iron fist

U.S. steps up military aid to Tunisia

U.S. MILITARY aid to Tunisia and Morocco is to be stepped up sharply next year. Aid to Tunisia will nearly double to \$140m and the Tunisians are to purchase 12 F5 fighter aircraft, worth about \$200m.

Hong Kong 'could seek finance from ADB'

BY ROBERT COTTRELL IN HONG KONG

HONG KONG'S Financial Secretary, Mr John Bremridge, told the Asian Development Bank yesterday that falling land sales revenue could lead Hong Kong to seek loan finance from sources including the Asian Development Bank.

part of our expenditure on capital works," and the Government was forecasting a budget surplus. But, he continued, "we have consciously brought ourselves nearer to the position in which we may have to seek alternative forms of finance to sustain our capital works programme."

He attributed the drop to both the high volume of Government sales and high interest rates. "The present trend in land prices could be prolonged," he added, citing Hong Kong's dependence on world trading conditions which were now unfavourable.

does not propose seeking further loans for the time being. Between 1975 and 1980 it drew four loans of \$200m (E11m) each in finance projects at Shatin in the New Territories.

Chinese to debate revised constitution

BY COLINA MACDOUGALL

FOR THE chaotic years of the Cultural Revolution, the Chinese behaved as if they had no constitution. They they abolished their all-but-suspended 1954 document, and, under the influence of Mao in 1975 and 1978 produced two short charters which were obediently rubber-stamped by a docile National People's Congress.

The document enshrines many of the principles—including the aim of modernisation and the reunification with Taiwan—which China's strong man Deng Xiaoping has tried to establish since 1978, and marks another milestone in China's slow progress towards stability and growth.

The change with the widest impact will be the suggested restoration of the old town and village system to replace the Maoist communes. After 25 years of the indifferent performance from this system, China is to revert to the old way of running local government.

But workers will lose out. The right to strike, inserted in the 1975 constitution by Mao himself and retained in the 1978 one, will go. The right to put up wall-posters (attributed also to Mao), deleted two years ago, has not been restored.

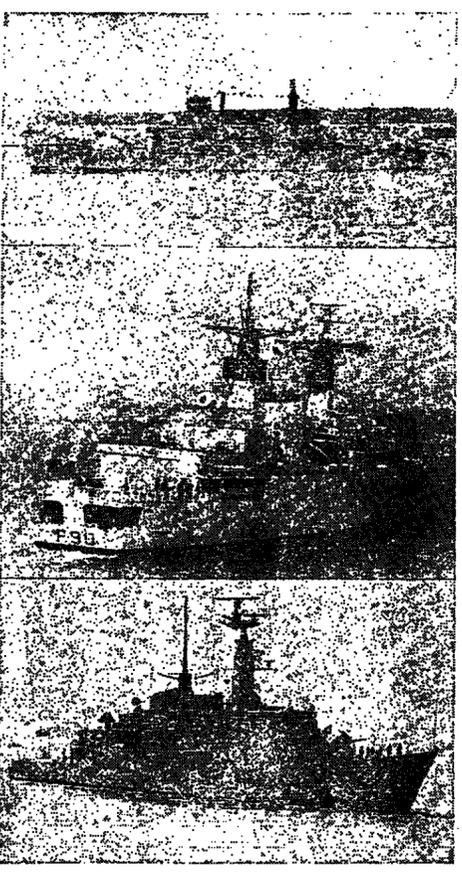
THE FALKLANDS CRISIS

Unions give warning in economy

Jimmy Burns in Buenos Aires... ARGENTINA'S main trade union movement, the General Federation of Labour (FT), has resumed its attacks on the Government's economic policies, after a brief truce ended as a result of the Falklands crisis.

FUEL TANKS ACT AS BALLAST British ships need frequent refuelling to maintain stability

MANY OF the warships in Britain's naval task force have to be refuelled every two or three days, which could affect the flexibility of the fleet now in the South Atlantic. Frequent refuelling is necessary because the fuel tanks in these modern British warships act as ballast. If the tanks are drawn down by more than 50 per cent, the stability of the vessel, especially in high seas, is said to be seriously affected.



SHIPS with high "top weight": from top, HMS Sheffield, type 42 destroyer, HMS Brilliant, type 22 frigate and HMS Arrow, type 21 frigate

Andrew Whitley writes a Buenos Aires diary Fine words and Latin gallantry

WATCHING the comings and goings of Mr Haig, the exchange of heli-copter salutes with Britain, and the sharp changes of mood in Argentina over the past few weeks have been like being on a roller coaster. Exultation one day, despair the next.

LITERACY is over 90 per cent, the highest rate in Latin America, and Argentina has had a fine newspaper tradition. Clarin, an 8-page tabloid, is a good example of what popular journalism should be about. In contrast, years of censorship and a heavy military hand equating thought with potential opposition have ossified the staid establishment newspapers La Prensa and La Nacion.

cleaning job. One, Oscar Gayuna—a 27-year-old mechanic with four children—has already been out of work for two months. He has to travel three hours each way by bus every day to get into the city centre to look for a job. Outside the capital, he says, those who can are clearing shop shelves in preparation for a long difficult period. He wishes he could do the same.

West German protests grow at BBC film on Argentina's nuclear plans

A STORM of protest has blown up in West Germany over a BBC film claiming that Argentina could shortly produce atomic bombs, thanks to help from old Nazis and a "secret agreement" with West Germany. West Germany and Argentina have an agreement on scientific and technical co-operation dating from November 1969, and the Germans are heavily involved in the building up of Argentina's nuclear power station capacity.

Government officials, the head of the German Foreign Policy Association and Herr Franz Josef Strauss, Minister for Atomic Affairs in the 1950s. At the same time, the respected "Frankfurter Allgemeine Zeitung" newspaper yesterday published an interview with a senior official of Kraftwerk Union (KWU), the major German power station building concern, rejecting the BBC claims.

devoted solely to the BBC film and to the history of German-South American nuclear co-operation: while the weekly "Der Spiegel" has a long article on the film, describing it as " rubbish".

but to notification with the International Atomic Energy Agency (IAEA). While Argentina, unlike Bonn, has not signed the Nuclear Non-Proliferation Treaty, the Germans say that Buenos Aires "de facto" has accepted IAEA controls. They do not believe that materials suitable for making weapons have escaped this net.

responsible and consistent in its policy on proliferation of nuclear weapons in recent deal with Argentina. In negotiations over Atucha 2, the latest reactor order placed by Argentina, the West Germans are said to have demanded and got a bilateral safeguards treaty between the two nations which is tough in terms than those set by the London Suppliers Group in 1977, of which West Germany was a member.

Handwritten Arabic text: "مكاتبنا في لندن"

Tax refunds planned to encourage Swedish shipowners

BY WILLIAM DULLFORCE, NORDIC EDITOR, IN STOCKHOLM

SWEDISH SHIPOWNERS can claim tax refunds of Skr 250m (US\$100m) next year under a bill submitted by the Transport Ministry. The Government's intention is to cut the costs of operating under the Swedish flag to halt the decline in the Swedish merchant marine. The tax refund scheme would be for five years. In the first year companies could claim a 75 per cent of the taxes collected from their crews. Ships which are considered important for national security could claim a 100 per cent refund while passenger vessels and ferries would obtain a 50 per cent. The percentages will be reduced gradually over the five years. Shipowners operating at sea would be able to claim a refund only if they guarantee to use it for investments in ships. The Transport Ministry hopes tax relief will induce the yards and sailors' unions to negotiate agreements which would further cut manning in Swedish ships. They estimated to be the highest in the world.

Japanese Eximbank financing at record

TOKYO—The Export-Import Bank of Japan announced yesterday it made financing commitments totalling a record Yen 1,636 trillion (US\$100 billion), approximately £3.7bn, in fiscal 1981, ended March 31, up 75 per cent from the previous year.

The sharp rise reflected increases in the Eximbank's export suppliers' credits and direct foreign loans, notably for plant exports. In addition, the banking agency boosted import credits and overseas investment credits for large-scale developments projects, particularly those related to liquefied natural gas (LNG), oil and aluminium smelting. The Eximbank entered into 326 export suppliers' credits in fiscal 1981 totalling ¥677bn up 63 per cent from the previous year. Suppliers' credits for plant exports rose by 57 per cent to 222 commitments totalling ¥229.5bn. Major credit commitments were made for steel-making facilities in Brazil and China and copper-smelting facilities in the Philippines. Ship export credits came to 84 commitments totalling ¥147.5bn, up by 85 per cent.

UK industrial exports to EEC curbed, figures show

BY PAUL CHEESERIGHT, WORLD TRADE EDITOR

THE RISING trend of British industrial exports to the EEC seems to have been checked, according to an analysis of the latest trading figures, worked out on a volume basis, by Freight Information Services. Over the three years 1979-81, the EEC share of Britain's total machinery exports fell from 33 to 29 per cent. Over the same period, the comparable figures for road vehicles are 45 to 39 per cent, and for beverages 27 to 26 per cent. Although the percentages of the UK's manufactured materials exports going to the EEC rose from 38 to 41 from 1979 to 1980, it slipped back to 40 per cent last year. The slipping EEC share has taken place against the background of a more general decline in the volume of exports in these selected key sectors, which account for over three-quarters of all British exports. Indeed, the striking feature of the figures is that the only area where there have been increases in export volume throughout the list is in the Middle East and North Africa. This reflects the continuing high level of capital investment throughout the area, although this might begin to fall off in the face of the glut on the world oil markets. But the figures cannot be taken as conclusive. The civil servants' strike last year and the absence of accurate statistics for six months meant that

	KEY EXPORTS AND MARKETS			
	TOTAL TRADE (m. tonnes)	EEC	Rest of W. Europe	PERCENTAGE SHARE OF SELECTED MARKETS Middle East, N. Africa N. America
Machinery				
1979	2,437	33	12	15
1980	2,523	31	12	15
1981*	2,327	29	11	12
Road Vehicles				
1979	1,509	45	14	7
1980	1,359	43	14	7
1981*	1,211	39	14	7
Chemicals				
1979	7,117	55	13	5
1980	6,877	53	14	5
1981*	7,090	55	14	5
Manufactured Materials				
1979	10,467	36	11	8.7
1980	8,261	41	12	8.8
1981*	8,515	40	11	9.2
Beverages				
1979	777	27	8	6
1980	709	27	8	5
1981*	496	26	7	3

* Estimate Source: Freight Information Services

At the same time the recession and the more stringent monetary and fiscal policies adopted through the industrialised world help to account for both the check in the rise of exports to the EEC and the generally sluggish performance in the rest of Western Europe and North America. That the overall volumes have remained as high as they have reflects the diversity of the British export markets. Indeed, it was noticeable that during his last weeks as Trade Secretary, Mr John Biffen, had begun to argue the case for the maintenance of this diversity, in contrast to the Government's more usual stand of stressing the importance of the EEC market. It was precisely this diversity, he argued, that allowed exports to maintain a high level in the face of the recession in the industrialised countries. Indeed, he went further to urge an increase in overseas investment

Fresh bid for smelter in Philippines

By Emilia Tagaza in Manila

REYNOLDS International of the U.S. has submitted a fresh bid to build the Philippines' first aluminium smelter, scaling down its original proposal for a \$450m (\$250m) plant which was given a go-ahead in 1980. Reynolds' new proposal is to construct a \$150m smelter with an annual capacity of 5,000 tonnes of different aluminium products. The original \$450m plant was designed to produce 140,000 tonnes annually. An aluminium smelter is one of the Philippines' 11 major industrial projects designed by the government to shift the country's industrial base. Implementation of Reynolds' first project was stalled because of disagreements with the state-run National Power Corporation (NPC) on power rates. Being an energy-intensive plant, Reynolds negotiated for a rate which is over than NPC's prevailing rate. When the project was suspended early last year Biliton International Metals of the Royal Dutch/Shell group and Swissair of Switzerland submitted their proposals for a \$150m smelter. While the Ministry of Industry is evaluating Reynolds' plans, it said that it is also looking seriously at an offer from Mitsubishi Light Metals of Japan. Ministry officials say that a Japanese company has offered to sell a slightly used aluminium smelter with an annual capacity of about 40,000 tonnes. Mr Roberto Ongpin, Trade and Industry Minister, said that Reynolds' offer is interesting because it features integrated operations. He said that smaller plant can produce downstream products like aluminium wire rods.

Thai Premier hopes for UK investment

By Colina MacDougall

Gen Prem Tinsulanonda, Prime Minister of Thailand, said in London yesterday he had high hopes that Britain would invest in technology for the development of Thailand's eastern seaboard. British companies have already done a feasibility study for the project, where a gas separation plant, deepwater sea port and container port are planned. Thailand's eastern seaboard is where natural gas, which came on stream last October, comes ashore. The development plan for the area includes exploitation of Thailand's oil. Gen Prem is leading a 50-strong delegation of economic ministers, businessmen and bankers. While no contracts are expected to result from the trip some progress has been made on the proposed \$365m extension by Davy McKee and two French concerns of the oil refinery at Sri Racha, south-east of Bangkok. At a meeting between Gen Chaitohai Choonhavan, Thailand's Industry Minister, and Mr Peter Rees, British Minister for Trade, export credits for the deal made some progress, though the British are not yet happy about Thai Government guarantees.

Baghdad metro date decided

By Our World Trade Staff

CONSTRUCTION of the Baghdad metro system, which is expected to cost more than £3bn, will start in August next year, slightly later than was first envisaged. The basic design of the transport system, which is expected to carry 1m passengers a day over a network of 32 km, is being undertaken by the British Metro Consultants Group, a consortium of ten companies. But detailed design contracts have not yet been awarded. The Baghdad Rapid Transport Authority has advertised, however, for both consultants, electrical and mechanical contractors to pre-qualify for such contracts and for the manufacture and supply of plant. The basic design of British Metro Consultants has been accepted by the Iraqi authorities. British Metro Consultants, which have a contract lasting until 1989, is made up of W. S. Atkins, Design Research Unit; Freeman Fox; Sir William Halcrow; Halcrow Fox; Charles Haswell; Henderson Busby; Kennedy and Donkin; Merz and McLellan; and Rendel, Palmer and Tritton. London Transport International and Transmark, the BR unit, are associates.

Record Swiss tourist season

By John Wicks in Zurich

SHARP rise in the number of British and American tourists has been largely responsible for a record winter sports season in Switzerland. Some 25 per cent more visitors from the UK and 30 per cent more from the U.S. and Swiss hotels in the three months from December 1 to February, compared with rise of 2.5 per cent in the overall tourist volume. The number of overnight stays in Swiss hotels reached a peak of 7.6m despite an 11 per cent drop in the number of German tourists, due to the weaker D-mark rate.

India awarded £144m Iraq rail contract

BY K. K. SHARMA IN NEW DELHI

THE INDIAN Railway Construction Company (Ireon) has been awarded a Rs 2,370m (£144m) contract by Iraq for the 150 km railway line. This is the first major contract in the company, which has set up mainly to undertake work overseas. The contract is considered significant as Iraq turned down a similar contract for a similar amount about four years ago, giving preference to a Brazilian firm. It was then that the Government decided to form Ireon. Ireon has already carried out work in Iran and now has contracts on hand worth more than Rs 3bn, according to Mr N. Kaul, its chairman. This is expected to increase to

Rs 4bn this year. In a separate development, India and Vietnam have set up a joint commission to identify projects in Vietnam in which the Indian Government can assist. These are expected to include developing the railway system and improving the working of textile mills and agricultural methods. The decision to set up the commission was taken at talks between Mr Nguyen Co Thach, the visiting Vietnam Foreign Minister, and Mr P. V. Narasimha Rao, India's External Affairs Minister. India already helps Vietnam in various development projects in addition to providing food and export credits of Rs 100m annually.

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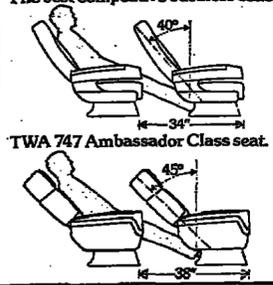
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UK NEWS

£6m venture to back new technology launched

By David Fishlock, Science Editor
A SOURCE of finance, called Cogent, to assist the transfer of new technology into the market has been announced in the City.

The nine member-laboratories of AICRO, with a staff of 4,000 researching a broad spectrum of industrial science, earned about £70m last year.

Sony to go into TV rental market

By Guy de Jonquieres
SONY of Japan is to challenge companies like Philips, Thorn EMI and Rediffusion in the £150m-a-year British market for rented televisions and video tape recorders.

Sony Rental will supply and maintain equipment to be marketed by its nationwide independent dealers network. A £1m advertising campaign begins next month.

Merger vote

THE Association of Certified Accountants has voted in favour of supporting — in principle — a merger with the Institute of Cost and Management Accountants (ICMA).

Prisons 'in crisis'

AN OVERALL drop in the prison population last year brought the service back from the brink of imminent catastrophe but the left is in a state of chronic crisis, Mr Dennis Trevelyan, the head of the Prisons Service, said yesterday.

Rolls-Royce loss

ROLLS-ROYCE, the state-owned aero-engine maker made a £22m pre-tax loss in 1980 and not a profit as printed in yesterday's paper.

Britain's oil 'good for 50 years'

BY RAY DAFTER, ENERGY EDITOR

OIL RESERVES in the North Sea and other offshore areas are sufficient to meet the current rate of UK oil demand for well over 50 years, according to a new Government report.

The Energy Department estimates that the UK continental shelf could still contain as much as 40bn tonnes. With last year's demand for oil products, including refinery fuel, running at 71.6m tonnes per annum, the remaining potential reserves are sufficient to meet needs to beyond the year 2037.

But the department warns that there are considerable geological uncertainties relating to the amount of oil which has still to be discovered. It was possible that total reserves may amount to only 3.1bn tonnes. At last year's level of production (59.4m tonnes) these reserves would be depleted within about 25 years.

The report — the so-called Brown Book — says that proven and probable reserves in existing discoveries amount to 1.6bn tonnes. Recent exploration in the more speculative areas, like the South-Western Approaches, had been largely disappointing.

Total revenue from the sale of oil amounted to £12.3bn last year compared to £8.9bn in 1980. Gas revenues, totalled £800m. Taxation from oil and gas activities, amounted to £3.9bn in 1980/81 and about £4.4bn in the financial year 1981/82.

The report says that total remaining recoverable reserves of natural gas in the UK continental shelf could be as much as 1.8 trillion (million, million) cubic metres. At the 1981 rate of production — 57.4 cubic metres — these reserves would last for about 48 years.

Total capital investment in oil and gas production last year was £2.9bn, about one-fifth of total UK industrial investment. So far £26bn has been spent on exploring North Sea oil and gas reserves.

The total value of orders for goods and services placed by offshore operators last year was a record £2.9bn. British companies secured contracts worth £1.9bn — or 67 per cent of the total.

But the offshore supplies industry is worried that a hiatus in oil platform building contracts in the past two years could lead to a general fall in orders and substantial redundancies.

A North Sea report published today by stockbrokers Wood, Mackenzie says that a "reasonable" number of platforms should be ordered during the next few years. But most of them would be small compared to most North Sea structures.

The brokers see the possibility of 10 platforms being ordered this year: one for Total's North Alwyn oil and gas fields; one for British National Oil Corporation's Beatrice field; five for British Gas Corporation's Morecambe field; and three for the Gas Corporation's Rough field.

In addition seven platforms could be ordered next year: one for Shell's South-East Incefield gas field; two for Amoco's East Leman gas field; one for Shell's Leman gas field; and three more for the Morecambe field.

The brokers warn that development programmes would be influenced by oil and gas prices, taxation policies and — in some cases — plans for gas transportation systems.

Development of the Oil and Gas Resources of the UK, 1982; SO; £5.50.

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Consortium finds more oil in Hampshire

BY OUR ENERGY EDITOR

A GROUP of offshore oil companies have struck more oil in the Humble Grove Field in Hampshire.

Carlless, Capel and Leonard — the consortium's operator — said yesterday that a second well drilled in the promising field had tested oil at a rate of 750 barrels a day (b/d). In addition in the high grade oil, with a specific gravity of 38 degrees API (American Petroleum Institute), natural gas was also found.

A gas flow rate of 3.25m cu ft a day had been tested in one section of the reservoir rock and a flow of 2m cu ft a day emerged from a deeper formation.

The well was drilled about half a mile north west of the first well which is currently yielding oil at the rate of 100-120 (b/d). Carlless said that appraisal of this reservoir would continue with a new well drilled about one mile east of the original discovery.

Interests in the Humble Grove licence are: Carlless, Cambrian Exploration, Candell Petroleum, Hason Oil UK Onshore, Marinex Petroleum, and St Joe Petroleum.

The companies have received Hampshire Council approval to drill three appraisal wells.

December-February quarter rose by 3.2 per cent compared with the corresponding three months a year earlier, according to Government figures published yesterday.

Demand, measured on a primary fuel input basis, amounted to the equivalent of 95.2m tonnes of coal. The demand for natural gas — up 7.9 per cent — accounted for all of the increase in energy use. The consumption of all other fuels continued to fall, coal by 0.7 per cent and oil products by 0.8 per cent.

When the demand was recalculated to consider weather variations, the underlying trend in overall energy demand was still seen to be falling. On an adjusted basis demand in the particularly cold December-February quarter was 3.5 per cent below the corresponding level of the previous year. Oil consumption was 5.4 per cent lower while coal demand was down 4.7 per cent.

The Government's Energy Trends publication shows that oil production, mainly from the North Sea, rose to 23.1m tonnes in the December-February period, 7.3 per cent more than in the corresponding quarter a year earlier. In contrast refinery output, at 18m tonnes, fell by 8.4 per cent reflecting depressed demand for oil products.

U.S. and Japanese motor manufacturers are already more advanced in utilising high-strength steels, encouraged in particular by U.S. legislation against gas-guzzlers.

The heavier a vehicle, the more petrol it consumes. U.S. motor-manufacturers have tried cutting the weight of their vehicles by using thinner steels and lighter materials such as aluminium and plastic. Steelmakers have an obvious stake in ensuring that the motor industry uses as much steel as possible.

BSC's Welsh laboratory has made a comprehensive investigation into ways of producing strip steels with enhanced strength-to-weight ratio, so that they can be rolled more thinly yet remain competitively-priced and retain ductility and 'formability', the capability to be moulded by normal pressing techniques into difficult shapes.

The District Auditor had argued that the Camden settlement had been up to 44 per cent higher for some grades of workers than the national settlement of the dispute.

His mathematical approach had been disputed by the council and, said Mr Justice Forbes, the council's decision on such an important matter must cast doubt on whether it could be said that no reasonable local authority could possibly have acted as Camden had.

The judge quoted extensively from evidence by Camden's Controller of Personnel Services about the effect of the strike on the borough, and about the fact that the council had been faced with a challenge from its employees who had been "determined and ideologically committed."

The evidence showed, said the judge, that nearly all other London boroughs had been in a much more favourable position than Camden.

The Labour group's decision had not been taken freely and voluntarily and without pressure, the judge concluded.

Apart from the effect of the strike upon its services, it had believed, not unreasonably, that the national negotiations were not being pursued as effectively or speedily as was required.

The fact that Camden had, in its circumstances, agreed to a settlement which might, in other circumstances, have been regarded as excessive did not mean that the councillors had acted unreasonably or had ignored the ratepayers' interests, he said.

A decision taken in an emergency must not be scrutinised as closely as one not taken under such pressure, he commented.

Great publicity — much of it hostile — had been attracted by the Camden decision. The District Auditor had clearly thought that Camden had given in too easily, and without a fight, to the strikers' demands.

But there was nothing to suggest any collusion or collaboration between councillors and strikers, said Mr Justice Forbes.

Business optimism up in NW

By Nick Garnett, Northern Correspondent

BUSINESS CONFIDENCE has increased in parts of the North West, according to a survey by the Manchester Chamber of Commerce and Industry.

The number of companies believing that turnover and profitability will improve in the next 12 months is the highest for the past year, says the survey of 33 companies covering a wide range of manufacturing. Even so, they represent less than half the companies in the survey.

Companies in industries that have been suffering structural decline, such as textiles and construction, say they see no signs of any early recovery. They believe recovery rests with newer, more resilient industries.

Home orders and home and export deliveries rose in the first three months of this year for 38 per cent of the companies — a higher figure than throughout last year.

A third of the companies in the survey say export orders are better than three months ago, but the improvement is smaller than at any time since March last year.

Barclays predict decline in interest rates soon

BY MAX WILKINSON, ECONOMICS CORRESPONDENT

UK INTEREST rates should resume a downward trend soon unless the financial markets suffer a major disruption from the Falkland Islands crisis, Barclays Bank says in its latest financial survey.

The bank believes that UK rates are likely to fall as part of a worldwide trend resulting mainly from the reduction of the inflation rate in the U.S.

It says the current high global rates may be traced to a high U.S. rate which result from imbalance between fiscal and monetary policies and the resulting prospect of high budget deficit.

Barclays suggests one reason for the high interest rates is that central banks — particularly in the U.S. — have been prepared to tolerate increased volatility because of their concern for monetary control. As a result, lenders have required a higher risk premium to be incorporated into long-term rates.

However, it says that perhaps the most "common-sensical observation" is that monetary authorities have had to drive up short-term rates in their attempts to control the money supply.

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Speed-up in telecom equipment sales urged

BY GUY DE JONQUIERES

THE GOVERNMENT is pressing British Telecom and its main traditional suppliers to speed telecommunications liberalisation by allowing the early private sale of equipment that at present can only be rented from BT.

The move is intended to leapfrog the formal three-year programme for removing BT's monopoly on most types of equipment set in motion at the beginning of October.

Ministers are disappointed that, in spite of all the publicity which has surrounded the programme, almost no approved new apparatus has so far appeared on the free market through outlets other than BT. The Industry Department, which is administering the programme, is under increasing political pressure to achieve quick results.

Officially, full liberalisation must await the definition of new technical standards for equipment, due to be published in stages from July. But Ministers suggest that equipment already approved and supplied by BT should be released for private sale before the standards are ready.

The Government also wants to accelerate private sales to give British manufacturers an opportunity to establish themselves on the open market before allowing imports of com-

Fire damage costs rise by £4m

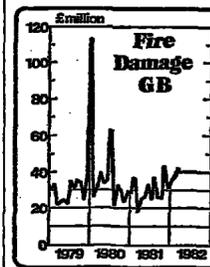
By Eric Short

TWO MAJOR fires, each causing damage in excess of £20m, boosted total fire damage costs in March to £41.5m. Costs were £4m higher than in February and more than double the costs for March last year.

Figures released yesterday by the British Insurance Association show that fire damage costs have risen in four consecutive months and confirm that last year's drop in costs was only a temporary phenomenon.

Total costs in the first three months of this year are £113.5m, more than one-third more than those for the first quarter of 1981.

However, the two major fires referred to were the only ones which exceeded £1m damage



A mystical measure of money supply

David Marsh looks at the monetary base and why it still puzzles Whitehall

Professor Brunner has been urging the Government for more than a year to start controlling the base as the best means of bringing down inflation. He has informed Whitehall of his pleasure that the Treasury and Bank of England seem to be controlling better than any other measure of the money supply.

The strange thing is that it all appears to have been done by accident.

The steady slowdown of the growth of the monetary base—cash in circulation plus the reserves of the banking system at the Bank of England—has been noted with approval by no less an authority than Professor Karl Brunner, the Swiss-American monetary expert much respected by Mrs Thatcher.

Now even he is puzzled. The Chancellor has himself been seeking guidance recently on whether it is Government policy to supervise the monetary base as well.

The latest Bank of England figures show that the monetary base has risen by only 3 per cent over the latest 12 months. One reason for the slowdown—at a time when sterling M3 is still growing (as it appears to do every year) by about 15 per cent a year—is because people are economising on cash balances.

Notes and coin in circulation, which make up about 90 per cent of the base, have hardly grown in the past year, even though some money-watchers in London have been reading conclusions into the base affair.

Learn from air industry, nuclear conference told

BY DAVID FISLOCK, SCIENCE EDITOR

THE NUCLEAR industry should learn from past lessons and mistakes of the aircraft industry, especially the economic advantages of standardisation and integration, Sir John Hill, chairman of British Nuclear Fuels, told the European Nuclear Society conference in Brussels yesterday.

The nuclear industry had paid "an enormous price" for trying to build nuclear plants with an industrial structure designed for the needs of 50 years earlier.

Sir John, who was made an honorary member of the society for his contribution to the development of nuclear power as a commercial source of energy, said the aircraft industry—which had preceded the nuclear industry by about 40 years—had been immensely successful technically.

Aircraft today were largely international, Sir John said. The 100-odd major airlines used similar though not identical mixes of about 10 aircraft types, having highly standardised requirements for fuel, components and ground equipment.

The aircraft themselves were made of sub-units built in many countries and by thousands of sub-contractors.

Advantages of standardisation and inter-changeability outweighed completely any marginal advantage of one aircraft design over another.

The way nuclear plants were built in 20 years' time "will probably include many of the characteristics of the way that large aircraft are built today."

Co-op launches campaign against milk imports

BY NICK GARNETT, NORTHERN CORRESPONDENT

THE Co-operative Union yesterday launched a national campaign among its customers and workforce as part of its attempt to prevent any significant import of milk into Britain.

The Co-op, which has been lobbying parliament to keep out imports, warned that parts of the country's milk distribution system would eventually be wrecked by cheap milk imports; and a considerable proportion of the 40,000 jobs involved in direct milk handling would be lost.

Mr Dick Bluer, the Co-operative Union's deputy general secretary, said imports would cause a fall in British milk consumption and would upset the economics of dairy farming.

Virtually no milk is imported into Britain because of the Government's health, hygiene and quality regulation. This position, however, has been challenged in the EEC and a judgment by the European Court is expected this year.

"If the European Court case were to decide against the UK government's view then it would appear to us that the only option is the total banning of foreign milk imports," Mr Bluer said.

DPP to investigate Clore estate tax fraud claims

BY RAYMOND HUGHES, LAW COURTS CORRESPONDENT

THE Director of Public Prosecutions is to investigate suggestions of a possible criminal conspiracy to defraud the Inland Revenue of tax due on the estate of the late Sir Charles Clore.

The papers in the case reached the DPP yesterday from the Inland Revenue, following the strongly-worded recommendation of three Court of Appeal judges earlier this month that the DPP should be asked to investigate.

The investigation will centre on the removal from England to Jersey, shortly after Sir Charles's death in 1979, of the £20.5m proceeds from the sale of his largest English asset, the Guy's Estate in Herefordshire.

The judges said that there was a grave possibility that the object of getting the money to Jersey had been to evade tax.

The Revenue, which estimates that up to £39m tax could be due from Sir Charles's worldwide estate, thought to be worth about £40m, claims about £15m capital gains tax on the Guy's sale.

The proceeds were moved to Jersey at the instigation of Stype Investments (Jersey), which is owned by a Jersey concern set up by Sir Charles.

The appeal judges said the proceeds were part of Sir Charles's English assets and subject to English tax and that the Official Solicitor should take over the administration of the

Metal package groups 'in danger'

BY MAURICE SAMUELSON

THE "BASIC FABRIC" of the British metal packaging industry is in danger of being destroyed by the recession, it was claimed this week.

The warning appears in the annual report of the Metal Packaging Manufacturers' Association representing more than 80 companies in Britain and Ireland with sales of nearly £1bn a year.

Mr John Boden, chairman, said that, despite becoming slimmer, "we are fast approaching that limit beyond which the basic fabric of our industry would be destroyed and future development and research capabilities hazarded."

The association's members include the large can makers, led by Metal Box and its U.S.-owned rivals, and suppliers of lids and other fittings.

Despite "isolated bright spots" and confidence about the industry's survival, Mr Boden found no grounds for optimism in the year ahead.

"We are bumping along the bottom of the recession," he said. "Only when the economy recovers shall we see consumer requirements rise accordingly."

"One's first impression on getting into the car is of the immense amount of room in it, and the pleasantly light interior thanks to the large areas of glass."*

"A glance in the rear compartment suggests acres of space. Try the usual test—can a six-footer sit behind the front seat adjusted for his normal driving position? Yes, and with room to spare."**

"The steering is certainly one of its plus points, for it has just the right amount of power assistance and when covering many miles on snow, ice and slush, I never had that horrid feeling of being isolated from the front wheels."*

"There is the promise of low running costs with the Tagora, particularly from its remarkable economy. As I drove on a rather hurried business trip through quite testing weather, I became more and more impressed at the way in which the Tagora seemed to go "for ever and a day" without refuelling."†

"Being the GLS model, it was already equipped with such goodies as central locking, electric window operation, and the Talbot Trip Readiness Tester, a panel that lights up like a fruit machine in full cry for five seconds after the ignition is switched on."*

"It responds very well, giving lively acceleration, and there is a crisp exhaust note which enhances the somewhat sporting feel of the car."†

"The Tagora has been totally reliable. It has always started first time, even when left out in the snow from Friday evening to Monday morning, when I had to spend nearly half an hour reconverting a species of igloo back into a motor car."*

"What Talbot has produced is a refined, distinctive looking car."††

Sheer poetry.



The Tagora 2.2



THE TAGORA RANGE:
 2.2 GL £7,551 (5-SPEED £7,739), 2.2 GLS (ILLUSTRATED) £9,390 (AUTO £9,891), 2.6 SX £11,194.†

Sources: *Motor **Autocar †Commercial Motor ††Motoring News ‡All prices exclude number plates, road tax and delivery charges and are correct at time of going to press.

Official DoE Figures: Tagora 2.2 (5-speed). At steady 56 mph—39.8 mpg (71.1/100 km). At steady 75 mph—29.4 mpg (96.1/100 km). Urban Driving—22.1 mpg (12.8 L/100 km).

STILL TIME FOR A PEACEFUL SETTLEMENT, SAYS FOOT

Callaghan leads back bench calls for unity

BY IVOR OWEN

IN A SPEECH which made clear impact on MPs of all parties Mr James Callaghan...



Callaghan: feared loss of life



Tony Benn: no killing for flags



Michael Foot: quoted Admiral

said they were the withdrawal of the Argentine forces and the end of the illegal occupation of the Falkland Islands...

"I believe a frontal assault would result in a huge loss of life," he said.

The Prime Minister listened in silence when Mr Callaghan appealed to her not to seek to overrule the service chiefs if they counsel caution.

Earlier Mr Michael Foot, the Opposition Leader, had quoted the views expressed by the commander of the naval task force, Rear Admiral Woodward...

He renewed his suggestion that Mr Francis Pym, the Foreign Secretary, should travel to New York to discuss the possibility of the UN Secretary-General playing a role in trying to achieve a negotiated settlement.

The Prime Minister, in the opening speech, again maintained that the diplomatic skills of Mr Alexander Haig, the United States Secretary of State, still offered the best hope of achieving success around the negotiating table.

She carefully left open the possibility of Mr Pym meeting the UN Secretary-General.

Mrs Thatcher assured the House: "If, at any time, either the Secretary-General or the Foreign Secretary thought that a meeting between the two of them would be likely to assist in achieving an acceptable solution then I say to the House that Mr Pym would of course go to New York straight away."

But she stressed that neither the Secretary-General nor the Foreign Secretary judged that any useful purpose would be served, at present, by such a meeting.

Mrs Thatcher described the latest proposals framed by Mr Haig—she emphasised that they were American proposals—as "complex and difficult."

Tory MPs cheered who she emphasised that the American proposals had to be "measured against the principles and objectives expressed so strongly in our debates in this House."

The Prime Minister said she was unable at present to disclose the terms of the proposals. Mr Haig had judged it right to ask Argentina to give its decision first on the proposals because it was the country to which the Security Council resolution condemning the aggression against the Falkland Islands was principally addressed.

Firmly restating Britain's objectives, the Prime Minister

by Britain had been based on the resolution approved by the United Nations Security Council. Without Argentine withdrawal Britain had no choice but to exercise its unquestionable right to self defence under the UN Charter.

She promised: "Of course, if Argentina withdraws we should immediately cease hostilities and be ready to hold negotiations with a view to solving the underlying dispute."

Mrs Thatcher insisted that it was quite wrong to suggest that because the invader was not prepared to implement the Security Council Resolution the principles of the United Nations required Britain, the aggrieved party, to forfeit the right of self-defence.

To further Government cheers

Mrs Thatcher declared: "Such an argument has no validity in international law. It would be to condone and encourage aggression and to abandon our people."

Mrs Thatcher recalled Britain's earlier efforts to settle disputes with Argentina through the international court, and indicated that she had little confidence that any fresh initiatives would produce any better result.

Mr Foot reaffirmed his support for the despatch of the task force to the South Atlantic, and explained that his clash with the Prime Minister earlier in the week, which had seemed to threaten the earlier unity in the House, stemmed from the fact that he believed she had "brushed aside" an appeal by

he UN Secretary General to avoid any escalation of the dispute.

Mr Foot with approval the reported statement of Admiral Woodward that "even at this late stage" there was still time for a diplomatic solution.

To cheers from the Labour benches he declared: "I say that the Admiral on this occasion was talking more sense than the amateur warmongers on the Tory benches."

Mr Foot urged the Prime Minister to take note that the paramount interest of Britain and of most countries in the world was that there should be a peaceful settlement of the crisis.

"I say... we have to try, try and try again to secure that peaceful settlement."

Underlining the importance of the House speaking, as far as possible with a clear and united voice, Mr Norman St John-Stevens (Con, Chelmsford), the former Leader of the Commons, stressed that even if a major escalation in the use of force proved necessary there would have to be a return to diplomatic discussions at some stage.

He also warned that the retention of the support of world opinion would be crucial for Britain in the coming weeks.

"There must not be a suspicion in the minds of the leaders of other countries that we are not sincerely and committedly working for peace," Mr St John-Stevens said.

He supported the view that if the latest proposals made by Mr Haig failed to produce a settlement the United States Government should openly and unreservedly align itself with Britain.

Dr David Owen, parliamentary leader of the Social Democrats, backed the views expressed by Mr Callaghan, and urged MPs to avoid a repetition of the situation at the time of Suez when British forces went into action in the knowledge that Parliament and the country were deeply divided.

He called on the Prime Minister to recognise that eventually, whatever happened, the dispute was going to have to be ended with a measure of compromise on all sides.

Dr Owen asked what the position would be if Mr Haig's latest proposals were accepted by the Argentine junta and were then found to be unacceptable to the British Government.

He said: "I believe it would be wrong to have a major escalation of our military commitment to seek re-possession of the Falkland Islands on the basis that the Government alone has rejected the proposals put forward by the United States and accepted by Argentina."

Labour Left-winger Mr Tony Benn (Bristol South East), shouting to make himself heard above the angry protests of Tory MPs, demanded a clear Commons consensus for the prevention of war with Argentina.

He said the United Nations should be put into the Falklands to protect lives and the fleet should be brought home.

"That is the message of hope that should emerge from this debate," he said. "We cannot kill for flags today."

The Speaker had to intervene to restore order and Mr Tony Marlow (Con, Northampton West) accused Mr Benn of acting as an apologist for the Argentine junta.

COUNCIL ELECTIONS. Jones the vote puts the boot into the Militants

BY NICK GARNETT, NORTHERN CORRESPONDENT

THE EMERGENCE of Balclava-hooded youths, and outbreaks of sporadic violence on the streets of Toxteth this week underscored the way economic and social strains and the law and order issue still bubble close to the surface in the heart of Merseyside.

Such emotional issues, though, are just two of many the politicians have been pursuing in the five metropolitan districts which make up the county area. More than half a million people live in Liverpool City, and double that in the other four districts.

A third of the seats are up for grabs in each of the districts—Knowsley, and St Helens, where Labour has big majorities unassailable in this round of elections; Sefton and Wirral, where the Tories are in control, but with apparently more vulnerable majorities; and Liverpool itself.

Liverpool has a hung council. Labour forms the largest group, but two years ago coddled a narrow attempt to take control, partly because it knew it would not be able to get its policies through the chamber.

The Liberals, who have built a well-organised machine in the city, are in control with 38 seats, as opposed to Labour's 40, and rely on support from some of the 21 Conservative members. Power has been in the hands of the Liberals or Labour since reorganisation.

Half-a-dozen features happily permeate the elections. One is the strength of the Militant Tendency within Liverpool City's Labour group, and the way this has been used in a robust—some might say vicious—campaign by the Liberals.

Another is the difference in the perception of how well the SDP will do in Liverpool, compared to the other four areas. The party is expected to make considerable gains outside Liverpool.

But in the city the Alliance is a creature with a lot of in-built strains, and SDP candidates have the added chore of making headway in an area where the Liberals are already in control and tend to reveal in it to the exclusion of anyone thought to be muscling in on their act.

Sir Trevor Jones, the Liberal group leader, known as "Jones the vote," has made it quite clear that, though the SDP are friends, there is no question of their being given council committee chairmanships. The SDP is fighting seven seats and could perhaps win two or three. It would surprise most Liberals if it won more.

The third factor is one that eats away within most of Britain's big urban conurbations, and is a particularly sore issue in some parts of Merseyside. That is council housing, house repairs and the environment.

In Knowsley, for example, which includes Kirby and Halewood, 72 per cent of housing is council-owned. Some councils have been facing an uphill struggle even to keep problems in check.

Economy is major national issue

The impact of the transport subsidies policy of Labour-controlled Merseyside County Council is difficult to pin down. One effect has been a county rate precept rise of 56.5 per cent in two stages—as popular with many electors as a hole in the head.

The dominant national issue, of course, is the economy.

The way economic illness is translated into the local scene gives the area its peculiar paranoia.

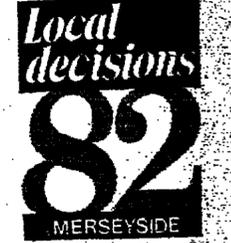
Four wards in Liverpool City are reckoned to have unemployment levels of more than 35 per cent. Knowsley has an official unemployment rate of 24 per cent, but a recent local study pointed to a higher figure and to 40 per cent in Kirby. Overall, broad areas within the county boundaries vary from 16 per cent to just over 20 per cent.

Some of the scenarios sketched by Alliance and Labour politicians are based on varying degrees of collapse in the Tory vote. But some are quick to point out how resilient Conservative support can be.

The prospect of rapid British success in the Falklands dispute is something no one is prepared to minimise as an influence. Signs have already emerged of the dispute's impact in bolstering national support for the Tories.

For what it is worth, the following results seem likely: Sefton—the Tories hold 53 of the 69 seats, and the Alliance and Labour believe the Tory vote may be squeezed, with the Conservatives losing their overall majority, though still remaining the biggest group.

The district has Crosby and Southport in the north—where the SDP might be expected to do well, particularly if Mrs Shirley Williams' parliamentary



Toxteth after the riots—Sir Trevor Jones, Liberal leader of Liverpool City Council, whose "robust" campaign has Labour leaders fuming

by-election victory has some residual effect—and Boothe in the south, which would normally be viewed as bread-and-butter Labour territory.

Wirral—the Tories have 37 of the 66 seats, and some are predicting the same outcome.

Liverpool—the 99-seat council may very well remain hung, though with the Liberals becoming the biggest group.

The Tories are defending seven seats. Their leader, Mr Sims Airey, the mayor elect, believes they will maintain their existing presence, with a loss here and a win there.

Some Tory seats, though, look very vulnerable to the SDP and Liberals, and both Labour and the Alliance believe Mr Airey's own seat in Chitwall could be lost.

The Tories have been campaigning on the basic issues of housing, social services and education, pointing to the Liberal administration wherever they find a bit of leverage.

Their campaign is in distinct contrast to the "initial one mounted by the Liberals, based on "Marxists out, Liberals in."

The strong Militant Tendency influence within a section of the Labour Party in the city has come in for some unpleasant bruising. In the past few days, the Liberals, who are defending 12 seats, have wheeled out their Liverpool resurgence manifesto and have been pushing their record in office.

"The Tory vote will collapse dramatically," says Sir Trevor, who argues that the question is whether the Liberals will win an overall majority.

Labour hoping to recover losses

The Alliance in Liverpool has been affected by continuing disagreements between Liberals and Social Democrats over parliamentary representation. Both the Tories and Labour say the Liberals have given the SDP "2 seats, seats to fight. Two or three of them, though, could be winnable."

Labour, which would need a net gain of ten to win an overall majority, would appear to have little prospect of taking much, if anything, from the Conservatives, but is hoping to pick up former Labour seats which went Liberal two years ago or before.

Mr John Hamilton, the 50-year-old retired schoolteacher who leads the group, has been trying to play a steady hand between the left and right within the Labour ranks. His party's election material has been attacking the Liberal administration, but the Liberal and Marxist campaign has been hurtful.

"They are scaremongering tactics to divert away from the serious issues," says Mr Hamilton. "It's Goebbels' tactics. We've seen it before among power-hungry people."



COMING AND GOING: Mr Francis Pym, Foreign Secretary, arrives at No. 10 Downing Street for a Cabinet meeting yesterday morning, and Mrs Thatcher leaves for the Commons

No objection to sports contacts

Financial Times Reporter

THE GOVERNMENT yesterday told the Sports Council it had no objection to sporting contacts with Argentina in third countries.

In a Commons written reply, Mr Neil Macfarlane, the Sports Minister, said: "I have advised the Sports Council, and shall be advising the governing bodies of sport, that it is the Government's policy to discourage all sporting contact with Argentina in the UK or in Argentina."

Parliament next week

COMMONS

Tuesday: Local Government and Planning (Scotland) Bill, remaining stages.

Wednesday: Finance Bill, Committee Stage.

Thursday: debate on economic and employment prospects in Wales.

Friday: Private Members' Bills.

LORDS

Tuesday: Copyright Act 1956 (Amendment) Bill, Third Reading; Oil and Gas (Enterprise) Bill, Committee Stage; Administration of Justice Bill, Report Stage.

Wednesday: debate on inland transport; Supply of Goods and Services Bill, Second Reading; Thursday: Epsom and Walton Downs Regulations Bill, Second Reading; Administration of Justice Bill, Report Stage. Debate on state aids to EEC agriculture.

Commons Sketch

Foot waves the little blue book

THE LITTLE BLUE BOOK of Michael Foot was very much in evidence in the Falklands debate in the Commons yesterday. Nearly everybody seemed to have one to hand.

The Opposition leader proudly waved his aloft. Mr Norman St John-Stevens (Con, Chelmsford), former Leader of the House, boasted he had one, too, and former Labour Prime Minister, Mr James Callaghan, said MPs had been studying it as never before.

Mrs Thatcher seemed to be the only person without one. At least, if she did own a copy, she kept it well hidden in her handbag.

The book in question was the Charter of the United Nations, the clauses and sub-clauses of which Mr Foot dwelt on at loving length. Once more, he warned the Prime Minister that she would do grievous damage to Britain's cause if she failed to make another attempt to find a settlement through the United Nations.

Right wing Tory back benches now seemed to reserve more of their hatred for Mr Foot than for President Galtieri and Johnny Gancho. Nobody would be surprised if any day now one of them crossed the Chamber to present Mr Foot with a white feather.

Winston Churchill (Con, Streteford) seemed to be back in the spirit of 1940, when he lavishly praised the Prime Minister's performance, and—in a dig at Mr Foot—contrasted her with those "who run for cover at the first

whiff of grapeshot."

There was also a nasty flank attack from former able-seaman James Wellbeloved (Erith and Crayford), who quit the Labour Party to sit on the Social Democrat benches. Scathingly, he said those who wanted to send the task force, but did not want to use it, were guilty of "a disgraceful, blatant policy of appeasement of aggression."

But, although Mr Foot, a self-confessed peace-monger, is not hot on military strategy, he showed a consummate command of parliamentary tactics.

War-mongers

He scored his critics by hating his critics by the words used in recent interviews by Rear Admiral Sandy Woodward, who commands the task force;

The location's admiral had said: "I am not in any doubt that, unless people say let us stop, it will be a long and bloody campaign and in my mind it is absolutely fundamental to try to avoid it."

Mr Foot, quoting from similar statements, agreed with them all and thought the admiral was talking far more sense than the "amateur war-mongers" on the Tory back benches.

The admiral's interviews have certainly caught the steady eye of Mrs Thatcher, who commented acutely that his remarks were always "vivid, if various." It is a fair bet that a signal will go out in the near future

Advertisement for John D Wood, Surveyors Valuers and Estate Agents, 23 Berkeley Square Mayfair London W1X 6AL. Telephone 01-629 9050. Includes a diagram of a building structure.

Arabic text at the bottom of the page.

Some employers voice reservations on enforcing new legislation

Wide backing for move to curb union power

FINANCIAL TIMES
Industrial Relations-
will Tebbit succeed?
CONFERENCE

THE GOVERNMENT'S efforts to reform industrial relations enjoyed widespread support among delegates to the FT Conference yesterday. But while employers welcomed the Government's Employment Bill, significantly some joined labour and trade union speakers in voicing some serious reservations about its practicality.

The Government should defer its provisions for the periodic review of existing closed shops until after the next election, Dr James McFarlane, director general of the Engineering Employers Federation, said.

His speech was seen as one of the most significant criticisms so far of this aspect of the Government's employment legislation. The EEF is the country's largest employer group and the largest constituent of the CBI.

The engineering industry has about 40 per cent of its manual workers and about 10 per cent of its staff covered by the closed shop.

He said: "In general we have no enthusiasm for the 1982 Bill's proposals for the review of existing closed shops. We can be quite confident that unions are not going to co-operate in holding ballots of existing closed shops; and it is certain that this factor, combined with the relatively large compensation available will excite a good number of unfair dismissal cases and industrial relations trouble in some factories."

Dr McFarlane accepted that there was little that could be done about the present position, given the Government's political will; employers would have to live with the consequences of the legislation as best they could.

"But we do believe that the government would do well to defer bringing in the provision for the review of existing closed shops until after the next general election — so as to reduce the incentive for unions to make general political capital out of particular cases."

He was also critical of the proposals for tightening the immunities enjoyed by unions against legal action.

He echoed the TUC's point that they recollected the conservatives' 1971 Industrial Relations Act and said: "There are grounds for believing that we may see a repetition here of what occurred under the 1971 Act: that is, unions becoming dangerously overconfident that

employers will be reluctant to exercise their rights — and then being tripped up by an action brought against them."

He gave broad support to the Government's proposals, but disagreed with such bodies as the Institute of Directors in their criticism of the EEF's ideas for a lay-off clause to protect companies from the effects of selective strike action. He also doubted the institute's proposals to link trade union immunities to procedure agreements.

THE Employment Bill could fail on the shop floor because of a breakdown in management-worker relations, Mr Leslie Walton, national chairman of the Institution of Industrial Managers, told the conference.

The Bill could exert its force only if it was accepted by rank-and-file trade union members. Since the TUC was under opposition to it, the only counterbalance had to come from managers.

This would involve close working together at shop-floor level, which was absent at present. That was a management problem, which would not go away because of the legislation, and in fact was likely to be worsened because of it. Legislation was not the only, or perhaps even the best way of improving industrial relations.

While many managers backed many of the proposed measures, such as assigning trade union and individual immunities and the review of the closed shop, opinions differed on other more practical matters.

There were real problems on the shop floor, and it was not sensible to believe that there was any deep difference of opinion between the trade union rank and file and its full-time officials.

Managers had no wish to attack indiscriminately fundamental trade union rights, or legitimate activities, though they were deeply concerned about the growing imbalance of power in favour of the trade unions.

Management accepted its responsibilities—previously legislation had improved British management—but at present it felt it was being dragged into the political arena.

Reports by Philip Bassett and David Goodhart

Mr Pat Lowry, chairman of the Advisory, Conciliation and Arbitration Service, said yesterday that it would be business as usual for Acas when the new Employment Bill becomes law.

He said that if the new sense of realism in British industry was to be more than a phenomenon of the recession the law must have only a limited role in industrial relations.

He said he would not welcome future legislation which granted union immunities on the condition of legally-enforceable arbitration.

Mr Lowry also said that the

1980 Employment Act had made very little impact. Of the 48,000 individual conciliation cases dealt with in 1980-81 only 35 arose from the Act. "And only 16 concerned union exclusion or expulsion," he said.

A warning that British Rail would face a stand-up fight from the unions if it went ahead with plans for 5,000 redundancies in railway workshops, was delivered yesterday by Mr Sidney Weighell, general secretary of the National Union of Railwaymen.

He said the NUR would not sit back and watch a publicly-owned industry crumble and disappear.

He accused the Government of starving British Rail of cash and challenged BR chairman, Sir Peter Parker, to protest publicly that the industry could not manage on its present grant.

He said that the railways were now a three-sided operation involving BR, the unions and Government. "It only requires one partner to renege on its responsibilities to bring the industry to its knees."

Privatisation was another potential field of conflict with Government but protecting jobs came before protecting the principle of state ownership, said Mr Weighell. He cited the reluctant NUR co-operation with privatisation of three British Transport Hotels.

PROFESSOR SIR JOHN WOOD, told the conference that the Employment Bill placed too much emphasis on reforming the closed shop.

He said: "The problem of the closed shop is only a symptom and the proposed legislation leaves the basic disease untouched."

The real need was for stability in industry. "The question is — do we get that stability from strong, professional, centralised unions, or not?"

He said that the old consensus covering the Donovan Report, Acas and the Prior Employment Act supported strong unions but that consensus was now under attack.

A compromise between ethical and power concepts was needed to produce a system which was reasonably fair and, above all, workable.

Prof Wood, of Sheffield University's Faculty of Law, also criticised the granting of retrospective compensation to those who had been dismissed because of closed-shop legislation after 1974.

Minister to meet dockers' leaders as strike threat looms

BY BRIAN GROOM, LABOUR STAFF

DOCKERS' LEADERS are to meet Mr David Waddington, junior employment minister, next Tuesday, as the prospect of an all-out national dock strike from May 10 draws near.

The Transport and General Workers' Union (TGWU) is calling an indefinite stoppage in all ports if the Government does not agree to move towards extending the National Dock Labour Scheme, which forms the basis of dockers' unique employment rights to all non-scheme ports and wharves.

The talks will not at this stage involve Mr Norman Tebbit, Employment Secretary, although the dockers' threat faces his department with one of its toughest decisions since he took office.

Any concession to the dockers could provoke an outcry from Conservative backbenchers, and from employers in non-scheme ports. These handle about 20 per cent of seaborne trade and employ up to a estimated 6,000 dockers, compared with 18,000 in registered ports.

Mr John Connolly, national docks secretary of the TGWU, insisted yesterday that he required an undertaking that the order would be made to bring the ports into the scheme before calling off the strike.

The dockers' new demand is a change of tactics from those of previous years. They are seeking an extension of the existing labour scheme established in 1967.

Previously, they have demanded a new draft scheme identifying extended areas of work for registered dockers to compensate for job losses caused by containerisation. The Government is required to do this under Labour's controversial 1976 Dockwork Regulation Act—but the law set no time limit.

This time, the dockers are not immediately seeking what was previously the centrepiece of their demands—the establishment of an extended "corridor" of registered dockwork around registered ports.

Even the new, limited demand, however, could run into difficulties in the unlikely event of the Government agreeing to it. An independent inquiry would have to be held if serious objections were lodged to an order.

Employers in non-scheme ports may well object. They fear the expense of subscribing to the scheme's national levy, its alleged inflexibility and the special protection given to the jobs of registered dockers.

Health pay action fears

BY IVO DAWNAY, LABOUR STAFF

THE TUC's 14-union Health Services Committee said yesterday that it would press ahead with a campaign of national industrial action, to begin within a fortnight, following the Government's refusal to boost funding for NHS pay.

It said this shortly before the Royal College of Nursing, the largest nurses' union, agreed to ballot its 195,000 members on whether a rule outlawing industrial action should be deleted.

Past ballots on the issue have always rejected any rule change, and it is highly unlikely that the RCN, which is not affiliated to the TUC, will take part in industrial action.

The TUC Health Services Committee said in its statement that nearly all the TUC-affiliated unions had indicated that their members were prepared to take part in the campaign.

The committee meets again on May 10 to consider detailed proposals for form and timetable of the action. Officials indicated yesterday that sanctions were likely to be similar to those begun on Monday by the 235,000-strong Confederation of Health Service Employees.

These include bans on all non-emergency hospital admissions, a series of selective two-hour stoppages, and instructions to members not to deputise for absent senior staff.

So far only the key National Union of Public Employees, with 300,000 NHS members, has failed to confirm support for the campaign pending the outcome of a countrywide consultation process at branch level.

Directors attack secret deals on closed shop

EMPLOYERS WHO attempted to do secret deals with unions on the closed shop were strongly criticised yesterday by Mr Walter Goldsmith, director general of the Institute of Directors.

Mr Goldsmith, speaking at the FT conference, said: Employers who may be tempted to do secret deals on their closed shop arrangements, designed to undermine the provisions of the Employment Bill, would be doing a grave disservice—both to British business and to responsible and effective trade unionism.

He said the institute's opposition to the closed shop was based on economic and humanitarian grounds. The closed

shop added significantly to union power, meant disciplinary matters were left to shop stewards, and made it more difficult to alter bargaining structures and restrictive practices.

He said the present Employment Bill was a necessary step towards creating healthier industrial relations "based on the sound business premise that everyone at work must be encouraged to honour contracts."

Employers would gain confidence at the negotiating tables with the new law behind them.

However, Mr Goldsmith predicted the introduction of a third employment Bill within the life of this parliament. It would make secret ballots com-

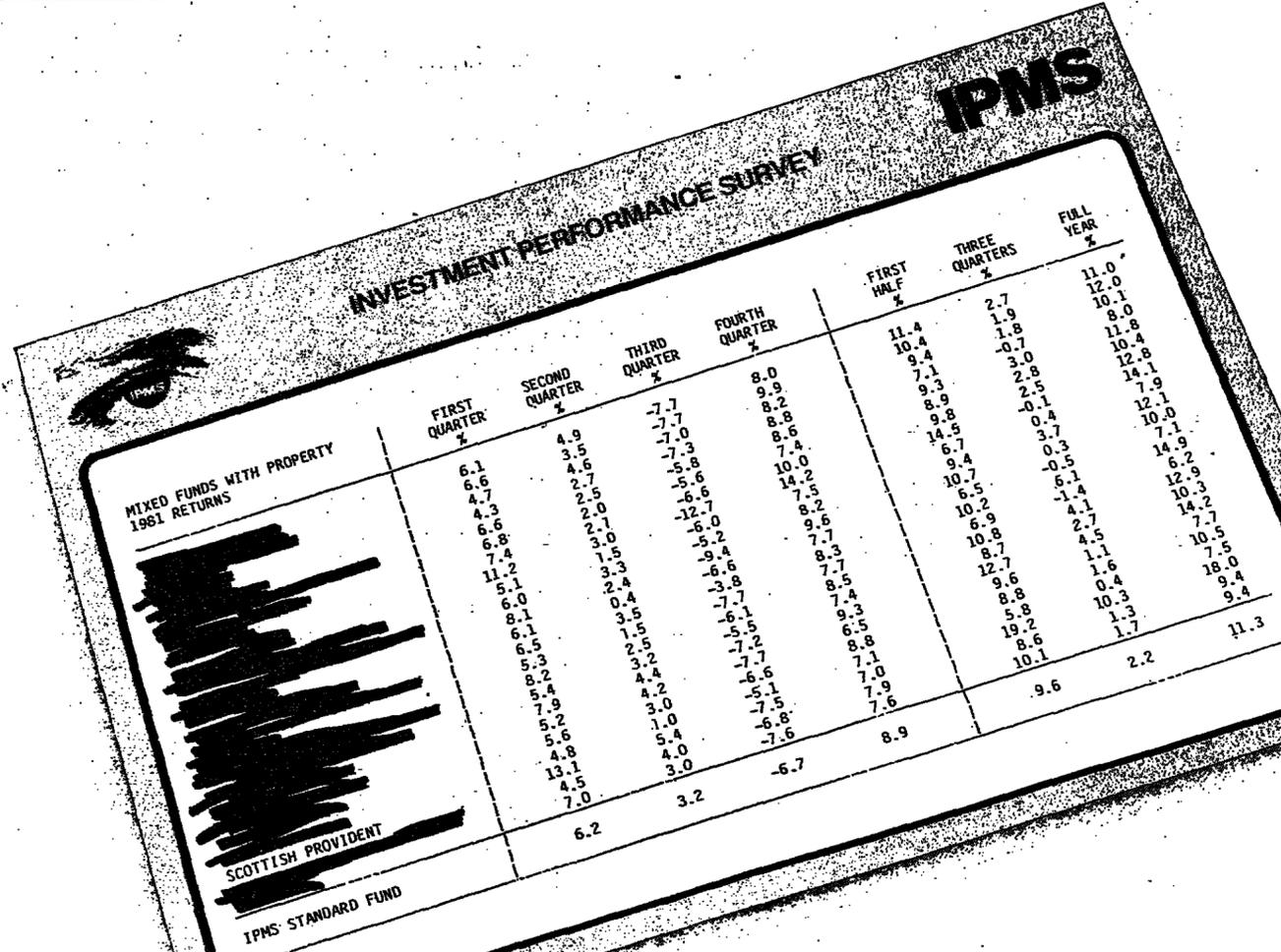
pulsory and would make unions' legal immunities conditional on their observing a voluntary agreed disputes procedure. This would "ensure that where a voluntarily agreed disputes procedure existed, then industrial action which took place before that procedure had been exhausted would not be protected by the law."

He attacked the TUC's campaign against the present Bill as political. Its intention was to undermine a Bill which has been introduced by a democratically elected government, and incidentally one for which more than 40 per cent of all trade unionists voted. "He said the Bill did not detract from the basic rights of trade unions to organise, bargain, strike and

picket peacefully.

Mr Goldsmith warned that the Tebbit Bill will only succeed if complemented by effective communications. "He said there had been a healthy upsurge in interest over the last two years in communications and consultation with employees."

"Recent changes in attitude among employees will not be permanent unless reasons for change are adequately communicated and employees feel involved in the decision-making which affects their working lives," Mr Goldsmith said. But he warned that employee involvement should not be confused with industrial democracy.



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TECHNOLOGY

How the Navy is securing its signals from the South Atlantic to the UK

High frequency (HF) radio, threatened with obsolescence for some years by communications satellites, is re-emerging as a secure point to point system for the world's navies. It is at this moment proving itself in the South Atlantic where most of the Royal Navy ships are equipped with Marconi's latest integrated communications system. Geoffrey Charlish reviews the position.

WHEN RADIO emerged as a point-to-point communications medium early in this century, the high frequency (HF) bands were used almost exclusively. They offered acceptably reliable communication over global distances.

craft itself, in splendid isolation 22,000 miles up, is becoming increasingly vulnerable. Soon it will become a relatively straightforward matter to "take out" a comsat with another, armed spacecraft, particularly since it is emitting radio signals that might be used for homing.

Large footprint

In addition, although satellite radio beamwidths are very small (a few degrees) they necessarily make a rather large footprint (the area receiving area) on the earth's surface and in that respect are no more secure than terrestrial radio such as HF.

So it is no accident that the U.S. Navy, which has equipped all of its major ships with UHF satellite terminals is having some second thoughts and is looking again at HF. It has borrowed a system from the UK

where the Royal Navy, although it deploys some satellite terminals has been working closely with Marconi Communications systems of Chelmsford and MEL of Crawley on a new integrated communications system, ICSS, which majors on HF.

Marconi has installed ICSS on all the RN ships now in the South Atlantic. Used with modern cryptography techniques, the systems provide, among other things, secure communications back to the UK.

In the past, a change of frequency in the HF bands has often meant physical changing of connections from one aerial to another, using various tuned couplers and cables. A number of adjustments had to be made and a change of frequency could take many minutes.

transmission, in only one second. A multiwire, wideband aerial has been perfected for transmission, another for reception. Separate, anal tuning of power output stages in what were, previously, a number of separate circuits has been done away with. Instead, ICSS uses a number of untuned wideband power amplifiers covering the whole 240kHz to 28MHz range.

Mimic panel

A number of users can work into the system at the same time, at various frequencies, in voice, telegraph or data modes, via a supervisory subsystem.

This subsystem in fact embraces all the ship's communications and via a central switching matrix allows any user permission to be instantaneously connected to any HF, VHF, UHF or Satcom circuit. A mimic panel shows the states of readiness of the various equipment, which include message switching facilities on a store and forward basis, engineered by MEL.

The transmitter and receiver drives incorporate channel memories to enable 19 frequencies to be pre-set; they can then be chosen locally or from a supervisory panel.



HMS Hermes and the frigate, Broadsword, now off the Falklands—the Marconi ICSS-E systems are working overline

moment is that "work is going on" on anti-jamming and frequency hopping techniques. Clearly however, this is one of the first equipments to become available which, because of the wide-band approach, allows quite agile frequency changing, although it is bound to be somewhat slower than that achieved in portable, lower powered equipment.

Hopping needs a hopper driver which in effect, contains the secure codes that say how the changes shall be made. If such a system is being deployed by the Royal Navy in the South

Atlantic, it is extremely unlikely that anyone other than the intended recipient is picking up the fleet's transmissions.

No more power than that needed for the distance involved is used. Thus, ICSS can be used at lower power for ship to ship work, perhaps 100 watts, rising to 250 w for intermediate distances and 700w for strategic communications over many thousands of miles. All three modes can be carried on at the same time, from the same aerial fed from the common wideband "power bank". A particular advantage is

that the ship need not be quite so festooned with aerials serving different frequencies. The mast or funnel itself forms part of the radiating structure, together with four wires, covering 9 to 28MHz. For receiving, a 1.6 metre monopole aerial is used with a pre-amplifier, allowing up to 36 receivers to be fed at the same time.

Marconi now expect the interest in HF to grow (it is talking to other navies). In battle, as one Marconi man pointed out, HF fails "soft" (station by station), "with a satellite, you lose the lot".

Cambridge applies itself to a potato pest

BY ELAINE WILLIAMS

THE PLANT Breeding Institute at Cambridge knows all about pests. It spends most of its time trying to produce new plant species—mainly the agricultural variety—which are resistant to attack from pests and diseases.

Its Queen's Award for Technology has been won for the 14-year development of Maris Piper, a member of the humble potato family. For two years the Maris Piper has been the leading maincrop variety and accounted for 24.2 per cent of all maincrops last year.

Frozen foods

Not only is it one of the few potato varieties which satisfies the standards of leading supermarkets but it

also is widely used in the manufacture of frozen dehydrated and powdered products.

The Maris Piper potato is resistant to attack by eelworm—known as cyst nematodes—which are the most serious potato crop destroyers in Britain and Western Europe.

Small tubers

According to the Plant Breeding Institute, annual UK losses due to the eelworm still amount to more than £30m compared with about £10m a year in 1970.

Before the introduction of the Maris Piper, the institute says that potato cultivation in some parts of the country, particularly the fens area of East Anglia, was threatened

by Globodera rostochiensis, one of the two eelworm species which reside in the UK.

The work on development of the Maris Piper began 30 years ago although it was not until 1966 that the potato made its first appearance.

Workers at the institute found that some wild and cultivated potatoes from South America were resistant. However, in the British climate the Andigena species of potato produces only very small tubers.

A single dominant gene was found to give the potato its resistance, so the institute set about crossing the Andigena with susceptible varieties until they produced a new potato which had large crops

and resistance to the British eelworm.

The institute has won two previous awards for industry, in 1973 and 1975 for work on wheat and kale. It is based at Cambridge and had a total research staff of about 180.

Pure research

The two people directly involved with the development of the Maris Piper were Dr H. W. Howard and Mr C. S. Cole both of whom have since retired.

The plant Breeding Institute, founded in 1912, is financed by the Agricultural Research Council. It mainly carried out pure and applied research to improve agricultural crops by breeding.

Toadstools with the mushrooms

BY LOUISE KEHOE

THE QUALITY of software programs sold for use on personal computers is variable—at best.

With new software houses popping up like mushrooms to take advantage of the boom in personal computer sales, it is perhaps inevitable that there should be some toadstools among them.

Pie charts

For those who have suffered the pangs of aggravation produced by the less succulent breed of software, it is refreshing to discover that the best quality products can taste like The latest offering from software publishing in mountain view, California, is one such.

A graphics package designed to run on the Apple II com-

puter, PFS graph will take data and turn it into graphs, bar charts or pie charts. "It is aimed at the businessman who believes that a picture is worth a thousand words," says the company.

Cleverly, personal software has made its data program compatible with graphics collected on visical files—as well as data held on files formatted by the company's own personal filing system (PFS). This promises to make the package, which sells for \$125, a best-seller.

Like visical, it could become a standard business tool.

Like personal software's previous products—PFS and PFS report (which generates reports from PFS files)—the graphs program is menu driven. Each time the user turns on, a menu

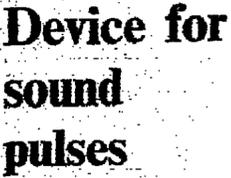
of options appears on the screen. Each selection produces another menu until the desired function is found.

This cuts out the tiresome business of learning special commands to perform desired functions—commands that are inevitably different for each program that the user purchases.

Colour graphs

PFS graph can work with either the Apple II printer or the popular Epson printer or the new Hewlett Packard low cost 147A plotter. With the latter, it can produce colour graphs or transparencies which can be used for presentations.

A version of the program designed to run on the Apple III will be available later this year, according to the publishers.



Microprobe Sonar Pulse device

Device for sound pulses

BESTOBELL-MOBREY, part of the international engineering group, has developed a new device for measuring the level of a liquid using sound pulses. What makes its "Sona Pulse" system different is that for the first time Mobrey is using micro-processor technology to analyse the sonar pulses.

This means the new instrument offers extensive facilities not seen in earlier devices. Channel flow

Sound based measuring systems like the Sona Pulse are especially useful where the levels of aggressive and corrosive liquids have to be measured.

The Sona Pulse is also useful for open channel flow measurements where, to quote Mobrey: "The flow to height relationship follows 3/2 or 3/2 power laws."

The sensor is equipped with a reference plus, minimum range is 10 metres, pressures of up to 3.5 bar and 70°C. About 40 different options can be keyed into the device using a front mounted numeric keypad—this is what distinguishes it from cheaper and simpler sonic distance measurement devices.

The system costs between £500 and £1,000. According to Mr Frank Benson, Mobrey's electronics marketing manager, the chief advantages of the new device are its accuracy, simplicity in operation and low price.

Government grant

It was developed with the aid of a Government MAPCON grant. Water authorities and the metals industries are already using the Sona Pulse in their installations. More on 0755 24548.

ALAN CAINE

FT COMMERCIAL LAW REPORTS

Director's indebtedness not a loan

CHAMPAGNE PERRIER-JOUET SA v HH FINCH LIMITED AND OTHERS

Chancery Division: Mr Justice Walton: April 26 1982

INDEBTEDNESS TO a company incurred by a director in respect of payments made on his behalf by the company and in respect of goods supplied to him by the company, is not a "loan" in the context of the statutory prohibition on loans to directors or the standard articles of association. Accordingly, in such circumstances, the company's rights under the articles to a lien over shares owned by a person "indebted" to the company, can be validly exercised over the director's shares despite provisions in the articles that the company shall not make a loan on the security of its shares.

RACING

ARDROSS, who has taken over Le Moss's mantle of staying champion of Europe, returns to the fray in this afternoon's Jockey Club Stakes at Newmarket.

It will be interesting to see how he fares over 1 1/2 miles against Gilt of Gold and Amyndas, who recently clashed in Newbury's John Porter Stakes.

pany's articles of association embodied clause 10 and clause 11 (significantly altered) of Table A to the Companies Act 1948. Clause 10 provided: "The company shall not make a loan for any purpose whatsoever on the security of its shares." Clause 11, as altered, provided: "The company shall have a first and paramount lien on every share registered in the name of a person indebted or under liability to the company." During the course of Mr Lynch's directorship, he became greatly indebted to Finch, such indebtedness being recorded as a "loan account" in such cases, in a "loan account." What had happened was that Finch paid a great many bills for Mr Lynch, and he took supplies of wines from Finch's stocks for his own company.

ward than many had anticipated a few weeks ago and the way could be clear for Hula Ruler and Top Lady to fight out the finish to the pretty Polly Stakes. Hula Ruler, who produced useful winning form in the autumn for Cunniff, is ready to do herself full justice. Top Lady will be all the better for her initial effort in the Wood Ditton.

There is likely to be little in it, but the proximity of four behind Top Lady in the Wood Ditton suggests that Hula Ruler's form is probably the better.

mortgage of his shares in Finch to the plaintiffs. On November 23 1979 notice was given to Finch of the existence of the plaintiffs' equitable charge. Mr Lynch defaulted in making the payment of £52 per year and Finch obtained judgment against him for £27,766 on May 18 1981. The plaintiffs called in the sums due under the guarantee on July 16 1981. The relief sought by the plaintiffs in the present action was, inter alia, a declaration as to whether Finch had any rights over Mr Lynch's shares; and a declaration that the plaintiffs' rights over the shares under the equitable charge took effect in priority to Finch's rights.

Under clause 10 of Table A, Finch would not be entitled to any lien on the shares in respect of a loan but as the vast bulk of Mr Lynch's indebtedness did not arise out of any loan transaction, Finch had a lien over his shares, conferred by clause 11 of Table A, as modified.

That lien took priority to the plaintiffs' equitable charge. Clause 7 of Table A provided: "The company shall not be bound to recognise (even when having notice thereof) any equitable interest in any share..." The plaintiffs' notice given on November 23, 1979, could therefore safely be ignored.

directors think fit, any shares on which the company has a lien." The real sub of the case was whether, if Finch chose to exercise its right to sell the shares, it had freedom to do so on the open market, or whether it was bound to do so through the fairly common transfer articles which it had adopted, particularly article 7. Article 7 prohibited any transfer of shares by a member of Finch without their first being offered to other members after issue of a "sale notice" to the company. The question was whether Finch had power under articles 12 to 14 of Table A to sell the shares without regard to article 7.

Mr Lyndon-Stanford for the plaintiffs, contended that there was nothing in clauses 12 to 14 which meshed with the provisions of article 7. In particular, there was no provision in the clauses whereby a sale notice could be served. He said that if the language of the relevant provisions was doubtful, they should be construed in such a way as to provide that the company had a completely unfettered power of sale.

Judgment for the defendants. For the plaintiffs: Michael Lyndon-Stanford QC and J. D. Martineau (David Atterton and Sewell). For Finch: Allan Heyman QC and Anthony Bompas (Ashurst, Morris, Crisp and Company). For Mr Welch: R. G. Fawcett (Ashurst, Morris, Crisp and Company). Mr Lynch was not present and was not represented.

BBC 1 TELEVISION

- 6.40-7.55 am Open University (Ultra High Frequency only). 9.00-12.00 For Schools, Colleges. 12.30 pm News After Noon. 1.00 Pebble Mill At One. 1.45 Heads and Tails. 2.02 For Schools, Colleges. 2.30-2.55 Weekend Wardrobe. 3.30 Pools v cwm. 3.53 Regional News for England (except London). 3.55 Play School. 4.20 Newsday. 4.25 This Week. 4.30 Harry Langdon. 4.45 Newsround Extra. 4.55 Blue Peter Special Assignment. 5.40 News. 6.00 Regional News Magazines. 6.20 News After Noon. 6.30 News. 7.00 Are You Being Served? The first of seven programmes starring Mollie Sugden and John Inman. 7.30 Odd One Out with Paul O'Niels. 8.00 Evidence Files: Detective series starring Tom Adams. 8.50 Points of View with Barry Took. 9.00 News. 9.25 McClain's Law starring James Arness. 10.15 The Battle for the Town Halls (London and South East only). 10.45 News Headlines. 10.50-12.35 am The Late Film: "Leo the Last" starring Marcello Mastroianni.

- 6.40-7.55 am Open University. 11.00-11.25 Play School. 11.10-11.25 Play School. 11.30 The Roaring Silence. 11.35 "College" starring Buster Keaton. 6.40 Something Else. 7.25 News Summary. 7.30 Snooker.

- 8.00 Gardener's World. 8.25 Newsweek. 9.00 Playhouse: "Lunch." 9.35 Snooker. 10.15 Scorp. 10.45 Newsnight. 11.30-12.35 am Snooker.

- 9.25 am Schools Programmes. 11.52 The Subtitles. 12.00 Song Book 12.10 am Once Upon a Time. 12.30 Our Incredible World. 1.00 News, plus FT Index. 1.20 Thames News. 1.30 About Britain. 2.00 After Noon Play. Elaine Greaves talks to Norman St John Stevens. 3.10, about his new book "From Puffin 111 to His Travels and Missions." 3.25 Racing from Newmarket covering the 2.30, 3.00 and 3.30 races. 3.45 Wild, Wild World of Animals. 4.15 Porky Pig. 4.20 Rumbler. 4.45 Freetime. 5.15 Film Fun with Derek Griffiths. 5.45 News. 6.00 The 6 O'Clock. 7.00 Family Fortunes. 7.30 The Fall Guy. 7.30 The Remender. 9.00 We'll Meet Again. 10.00 News. 10.45 Benson. 11.15 The London Programme: The London Crunch: The SDP/Liberal Alliance and the Local Elections. 11.50 Daily starring Dolly Parton. 12.20 am Nightlife: Rawhide starring Clint Eastwood. 1.20 Close: Sit Up and Listen with Mary Craig. † Indicates programme in black and white.

ANGLIA BORDER CENTRAL CHANNEL

- 12.30 pm The First Day. 1.20 Anglia News. 3.45 The World We Live In. 4.20 Newsday. 4.25 This Week. 4.30 Harry Langdon. 4.45 Newsround Extra. 4.55 Blue Peter Special Assignment. 5.40 News. 6.00 Regional News Magazines. 6.20 News After Noon. 6.30 News. 7.00 Are You Being Served? The first of seven programmes starring Mollie Sugden and John Inman. 7.30 Odd One Out with Paul O'Niels. 8.00 Evidence Files: Detective series starring Tom Adams. 8.50 Points of View with Barry Took. 9.00 News. 9.25 McClain's Law starring James Arness. 10.15 The Battle for the Town Halls (London and South East only). 10.45 News Headlines. 10.50-12.35 am The Late Film: "Leo the Last" starring Marcello Mastroianni.

- 11.32 am What's On Where. 6.25 Spleenman. 7.30 Hit on Her. 7.45 Channel Late News and Weather. 10.45 House Calls. 11.30 News. 11.45 News Summary. 1.00 am News and Weather in French. 8.30 am First Things. 12.30 pm World of Animals. 1.30 Newsday. 1.35 News. 1.45 About Britain. 10.45 House Calls. 11.30 News. 11.45 News Summary. 1.00 am News and Weather in French.

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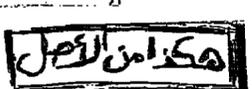
RADIO

- 6.00 am As Radio 2. 7.00 Mike Road. 8.00 Simon Bates. 11.30 Paul Burrett. 2.00 pm Steve Wright. 5.30 Newsbeat. 6.45 Roundtable. 7.00 Andy Peebles. 8.00 John Peel (S). 6.45 Sports Desk. 8.00 Barn Dance (S). 8.45 Friday Night is Music Night (S). 9.35 Sports Desk. 10.00 The Random Jottings of Hings and Brackets. 10.30 Adventure Coasts (to personal view of popular music).

- 6.55 am Weather. 7.00 News. 7.05 Morning Concert (S). 8.05 News. 8.05 This Week's Composer. 8.15 (S). 8.45 Northern Sinfonia of England (S). 10.30 Monteverdi (S). 11.30 Beethoven and Brahms piano trio recital (S). 12.25 pm Midday Concert, part 1 (S). 1.30 News. 1.35 Midday Concert, part 2 (S). 1.50 Music for Piano Duo (S). 2.25 Baroque 1981 (S). 4.00 Concerto for Flute (S). 4.55 News. 5.00 Mainly for Pleasure (S). 7.00 The Romance and

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Device
sound
pulses



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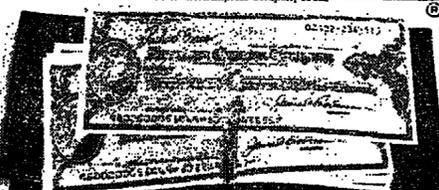
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American Express Travellers Cheques

THE MANAGEMENT PAGE

EDITED BY CHRISTOPHER LORENZ

The 'skinflint' airline that got a grip on itself

Ian Hargreaves explains how TWA is fighting the squeeze in the aviation industry

ASK Edwin Smart, chairman of Trans World Corporation, whether he ever seriously thought about selling his main business, TWA, the most flourishing of the big U.S. international airlines, and you get what he calls "a guarded answer."

"It is a subject," he says, "which cannot be disregarded. With only one or perhaps two exceptions no airline in the U.S. has generated an adequate return on capital. The business man has to look at that fact and ask himself whether it is a portent for the future or not."

He has received two actual approaches, he says, one well publicised from Texas Air, the other, never disclosed, from an unnamed source. The board, he says, decided on both occasions that TWA was not for sale, but he adds: "every property in the business world ultimately has its price."

If that sounds like a recipe for unease among the ranks at one of the world's largest and best known airlines, such has indeed been the case.

But, when you boil it down, it has also been the underlying reason why TWA and its parent corporation, under Ed Smart, have so far come through the worst slump in the U.S. airline industry's history more or less unscathed, in sharp contrast to the 1974-75 recession, when TWA was, with Pan Am and a couple of others, a prominent member of the industry's casualty ward.

Pan Am flew out of that recession smack into the same problems in this one. The airline expanded (by buying National Airlines) and modernised its fleet at break-neck speed in pursuit of the industry's conventional wisdom

that only the most modern fleets could survive in a period of rising fuel prices.

Ed Smart, and the finance man he promoted to run TWA, C. C. Meyer, became known as the industry's skinflints. Today, they are hailed as two of the few who got it right.

According to Neil Efrman, TWA's head of planning, it was almost as simple as taking finance seriously, something which is not automatic in an industry noted before the current slump for its clubby disdain for matters financial. "We brought in the finance function—that was a major part of it. They laid on the line what the available capital would be in a realistic fashion."

Wriggle out

From that fundamental stringency, and a resultant decision never to make long-range aircraft purchase commitments, TWA constructed a strategy. (In 1979, TWA got Boeing to break with traditional practice and agree to take firm orders for 10 787 aircraft and 35 options, rather than Boeing's normal formula of allowing one option for each firm order. Other airlines ordered in excess of 30 787s and have since been trying to wriggle out of their commitments.)

The strategy involved, obviously, cutting routes where the airline no longer had the right aircraft or adequate traffic to sustain profitable business, but the re-alignment was made relatively painless by the decision to implement it in a boom which made job losses less sizeable and less painful.

Because the cuts were counter-cyclical, TWA was also

able to take more time over its plan, which over a period emerged as one of the several "hub and spoke" structures to be developed in the late 1970s by a number of the more successful American airlines.

Hub and spoke involves an airline focusing its business on the airports where it has a lot of service and a dominant market position and finding, as far as possible, opportunities to link up flights and timetables to carry its passengers on two and three leg journeys without delivering them into the arms of another carrier. This is a particularly useful strategy for an airline like TWA which has important, profitable long-haul international routes like the North Atlantic where competition is strong both on price and service quality.

So, TWA worked to build up hubs like St. Louis and Kansas City, increasing service by 75 per cent to St. Louis, for example, partly by adding flights to smaller cities not previously served by TWA. In total, TWA now serves 50 U.S. cities, against 35 before 1976—a change made possible, of course, by President Carter's decision to deregulate domestic airlines and allow them to enter or abandon routes at will.

The quid pro quo was to pull back from some big cities, like Chicago, dominated by the home-town carrier United, and where TWA has cut services by 60 per cent since 1976.

The net result of all this was that TWA flew into 1980, which until the Carter Spring credit crunch every one expected to be a good year for airlines, on a path of contraction. The amount of revenue passenger traffic fell by 8.3 per cent in 1980 and in 1981 by a further

8.5 per cent. But because fewer seats were being offered, the percentage of those seats occupied actually rose against the industry trend from 61.7 per cent to 62.4 per cent.

Even this, however, was not enough to keep TWA out of the red and the airline lost \$75m pre-tax in 1980 and 1981 and will doubtless show another heavy loss in the first quarter of this year.

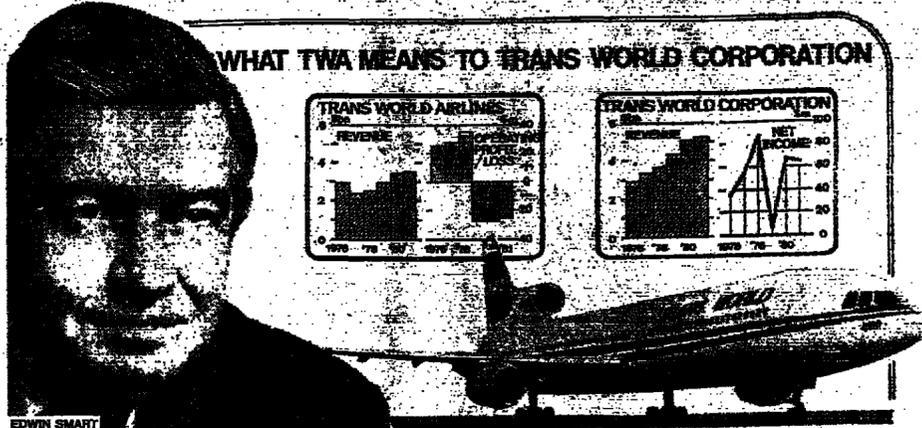
But here, the other advantage of Ed Smart's sentimentality about aeroplanes came to the rescue in the form of the non-airline businesses he had been able to build up in the period while he was, in a sense, starving TWA into better health.

Hilton International, a major hotel chain, with a policy of managing rather than owning, has become highly profitable and is now expanding vigorously into the U.S., where it may find the going tougher.

Canteen, a food service group acquired from IIT in 1973, is suffering somewhat from Midwest tummy—it serves primarily the depressed factories of the industrial midwest—but Smart sees a brighter future as the company builds up its business in the sports arena and office service sectors. Canteen last year increased pre-tax profits from \$18m to \$22.1m.

Spartan Food Systems owns low-price family restaurants mainly in the economically healthy sunbelt and increased 1981 pre-tax profits from \$21.1m to \$30.3m in what was only its second full year as part of Trans World.

Century 21, a huge, franchised chain of estate agents, bought by Smart in 1979, managed a modest profits



increase in spite of the worst year in the U.S. housing market since the 1930s. This business, says Smart, offers scope for another phase of diversification into the insurance field.

The bottom line told the story. Net income of \$64.3m was down only a fraction on 1980, in a year which nearly killed two large airline competitors, Braniff and Pan Am, and which led to the effective merger of two others—Continental Airlines and Western Airlines. As icing on the cake, TWA also ended the year with a stronger balance sheet than when it started, thanks to a deftly timed venture into the equity market and a sale of some low-interest debt which cut the company's debt to equity from just over 2:1 to 1.8:1 in 1975-76, the ratio peaked at 5.6:1.

No business plan, however, comes without costs and Trans World's is no exception.

The most obvious sacrifice has been an estimated percentage point drop (to just over 7 per cent) share of the U.S. trunk carriers' (major airlines) market. Perhaps more poten-

tially damaging has been the unchecked ageing of TWA's fleet, which at 11.7 years is the oldest of any major carrier and compares, for example, with a little over 7 years at Delta, the industry's most successful carrier.

Wage freezes

Even this negative, though, is somewhat offset by the recent decline in fuel prices, which makes older aircraft less of a cost liability. It can hardly be claimed by TWA that it foresaw the oil glut, but rapid changes of this kind have certainly made a virtue of the short-horizon planning technique.

Another valid criticism has been TWA's relative slowness off the mark in tackling its problem of inflated labour costs at a time when its more crisis-stricken competitors have been negotiating wage freezes and even pay cuts thick and fast.

Recently, however, TWA has completed the first of a series of scaled-down pay deals and should therefore soon start to make some progress. But the

airline has a long way to go, starting, by its own admission, a total domestic operating cost in 1980 of 56.7 cents per mile, against a 52.5 cent average for U.S. domestic trunk airlines.

When set against the up and coming new and regional carriers, as TWA is on several U.S. routes, the airline is just as much out of line as any of the other flabbier trunk carriers. For its services between La Guardia airport, New York and Columbus, Ohio, TWA reckons it spends \$6,096 per flight to offer 101 seats, compared with the \$3,187 of rival People Express, which pays its staff less and manages them better.

An even more intractable problem for TWA is its seasonal difficulty caused by the fact that its August traffic is roughly 180 per cent of its normal February traffic. In an attempt to increase use of its equipment in winter, TWA piled into the overcrowded Florida market two years ago, helping to cause a fare war and suffering losses as a result.

Efrman, whose problem this is, confesses that TWA is running out of ideas on how to solve it, short of trying to break further into the almost equally tight winter sun markets of Mexico and the Caribbean.

But in spite of these well-stated difficulties and the fact that in TWA's view, domestic airline traffic in the U.S. will probably remain in 1982 at the depressed levels of 1981, Trans World looks like a company which has got a grip on the problems which face it. This suggests that in the next cyclical upturn, it should be a very profitable company indeed. Profitability also stands to gain from the demise of Laker Airways and by the gradual softening of the Reagan Administration's stance towards the participation by U.S. airlines in the price-fixing activities of the International Air Transport Authority.

TWA's strategy is obviously not beyond challenge—indeed Eastern, which has been boldly if riskily trying to expand market share through the slump is pursuing a diametrically opposite course—but for the moment it certainly looks like the right one.

Even Ed Smart, an ex-lawyer who cultivates both his sentences and, one guesses, his enthusiasm, with little haste and much precision, sounds like he is encouraged. Maybe, in time, he will even start to believe his airline's own advertising jingle: "You're gonna like us—TWA."

1. Whose turnover from the supply of systems to ICL users exceeded \$2 million in 1981?

2. Who has over sixty designers and programmers working exclusively on ICL TP systems?

3. Whose business is it to look after the ICL user's better than ICL itself?

4. Whose TPS was copied by ten more organisations in March 1982 alone?

5. Whose TPS is so far ahead that users regularly convert established systems to it?

6. Who should you talk to if you want your users to be online, on time, on cost?

Who is about to launch the software system which will revitalise ICL?

the answer is - Telecomputing

If you have any further questions you would like to know more about our launch presentations in London and Manchester contact:

Charles Smith (0658) 775688

TPS/IM TPS/MM

A BOOK OF FIVE RINGS

THE CLASSIC SAMURAI GUIDE TO STRATEGY

WRITTEN IN 1645 AND NOW AN INTERNATIONAL BESTSELLER

ALLISON & BUSBY

MIYAMOTO MUSASHI

Cut and thrust for business warlords

QUALITY circles, robots and the life-time employment system have all been credited in the West with holding the key to Japan's success in the past few years. Now it seems to be the turn of a seventeenth century swordsman, Miyamoto Musashi, whose book on "strategy" has become a runaway bestseller in the U.S.

Musashi's book, written in a cave in 1645 and translated into English by one of the British Museum's Japanese specialists, has sold 130,000 copies in its American edition, apparently to people who believe that his down-to-earth instructions on how to thrust and parry contain precious clues on ways to drive your competitor out of business. The paperback edition of the book went on sale in Britain yesterday with the publishers confidently predicting another runaway success.

It is no criticism of Musashi (though it may be one of his publishers) to say that a close study of A Book of Five Rings will not enable Western export managers immediately to score smashing successes in the Japanese market, or to parry Japan's invasion of them. In so far as the book's teachings have any direct application outside the world of fencing they seem to be very general indeed and by no means uniquely Japanese.

Musashi places heavy stress, for example, on the importance of timing, and says that in order to win in a fencing match you should try to put yourself in your enemy's shoes. Both these observations could presumably apply in other contexts (including economic ones). But neither seems to justify the claim that a 17th-century fencing master can unlock the secrets of today's "miraculous" Japanese economy.

If Musashi has something to offer modern readers who are not themselves expert or would-be expert swordsmen, that something is presumably the philosophical framework that underlies his practical hints on fighting. The author makes clear from page one of his short treatise that sword fighting is actually about something much more than polishing off one's enemies. The Way of the Sword (Kendo) is, in Musashi's eyes a form of discipline that can lead its devotees towards a state of enlightenment worth attaining for its own sake. Exactly what this state consists of is not described in the book—except in the single enigmatic paragraph headed "The Void" which forms its final section.

The uselessness of words to describe what Musashi claims to be offering his readers, however, merely proves its value

Charles Smith

PROFITS IN EXCESS OF LIRE 1.5BN FOR SABIEM

Sabim, the Bologna-based elevator manufacturing subsidiary of the Estropi Group reported a turnover of Lire 48bn in 1981, with a 39 per cent increase over the previous year and against losses of Lire 3.5bn in 1979.

At a meeting recently held in Bologna to approve the 1981 company budget Sabim's chairman, Mr Edoardo Cappuccini, told shareholders that the group's successful performance last year was due to the introduction of a number of measures. The company, with a workforce of 877, whose exports last year amounted to 46 per cent of production, improved company management of commodity credits, thus increasing liquidity and curbing financial charges. Subcontracting operations were also reorganised and domestic and foreign sales networks improved to expand the group's export markets. Production was streamlined to expedite orders on the books. Sabim also promoted its R. and S. activities especially in the field of elevator cages design, with a view to those markets particularly interested in Italian styling.

SABIEM'S TURNOVER FOR 1981 (AS COMPARED TO 1980)

Domestic Sales	+62 per cent
Foreign Sales	+58 per cent
Domestic Maintenance and Repair Work	+21 per cent
Smelted Pig Iron Production	+15 per cent

The Group's indebtedness was cut by 22 per cent and its bank borrowing fell by 36 per cent.

Profits were also reported by Sabim's subsidiaries in Mexico (Eads), Venezuela (Caes) and Italy (Sime).

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NET PROFIT: 10,680 million lire (8,471 million in 1980), of which 3 billion were distributed to shareholders and 7.6 billion were allocated to the ordinary reserve.

DIVIDEND: 300 lire per share, payable from April 28, 1982 (240 lire in 1980).

CURRENT AND DEPOSIT ACCOUNTS: 2,725 billion lire, of which 2,172 billion were customers' deposits.

LOANS AND ADVANCES: 2,000 billion lire, of which 1,148 billion with customers.

SECURITIES PORTFOLIO: 730 billion lire, with a profit of 12,811 million including trading with customers.

ACTIVITIES: Further expansion of the foreign department (+43%) and securities (administered securities amounted to 1,429 billion, +43%).

DOCUMENTARY CREDITS, GUARANTEES, ACCEPTANCES: They were increased to 363 billion (+52%) including 102 billion banker's acceptances.

STAFF: 1,995 employees, +5% over 1980.

MAJORITY SHAREHOLDERS: Monte dei Paschi di Siena Group.

SOME SIGNIFICANT BALANCE FIGURES AS AT 31/12/1981: (in billion lire)

DEPOSITS:	
• customers' deposits	2,172
• banks' deposits	518
FINANCIAL ASSETS:	
• loans and advances to customers	1,148
• deposits with Italian and foreign banks	830
• compulsory reserve with Banca d'Italia	294
SECURITIES PORTFOLIO	730
SHARE CAPITAL, RESERVES AND FUNDS	125

Chairman: Cesare Panizza
Vice-Chairman: Edoardo Cattellani, Alberto Falck
General Manager: Giuseppe Lazzaroni

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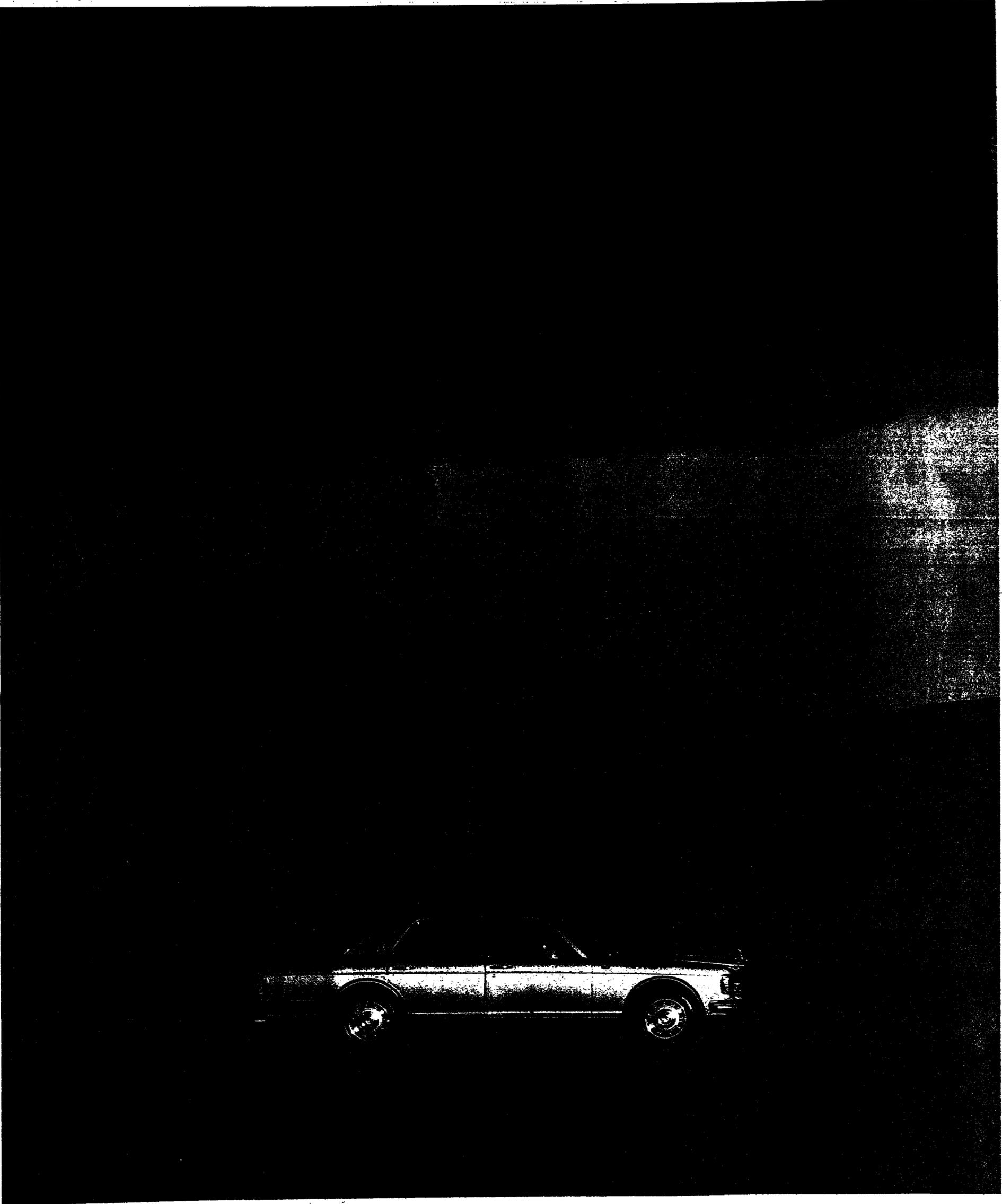
(*) Sobornay Survey October 1981

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The Rolls-Royce is not the car it was.

SOME THINGS THAT HAVEN'T CHANGED

Last Monday we promised to show readers of the Financial Times the changes that have made the 1982 Silver Spirit the most advanced car ever to carry the Rolls-Royce name. One other virtue of the car is worth mentioning - and that a less fashionable one. It is conservatism,

with a small c.

It still takes one man one day to make the Rolls-Royce radiator. It still takes him five hours to polish it. And the man who wrought this unique piece of sculpture still demonstrates his pride of craftsmanship by engraving his initials on the back of

the gleaming finished product.

Rolls-Royce still employ specialists - leather workers, tinsmiths, cabinet makers, seamstresses, the best of their kind in the world - to do by hand and eye what machines cannot do.

It still takes over three months to make a Silver Spirit.

And it is still true that every car that leaves the factory is, in a thousand subtle ways, different from every other.

These things are so, not just because Sir Henry Royce decreed them, but because this kind of single-minded perfectionism is the only way

to make the best of anything in the world.



THE PROPERTY MARKET BY MICHAEL CASSELL

Investment tide hits a peak

THE TIDE of enthusiasm among institutional investors for commercial property swept nearly £2bn of pension fund and insurance company money into the UK property market during 1981. That tide may well now be on its way out but, according to this week's figures from the Central Statistical Office, it managed to carry the institutions along on the biggest property spending spree yet recorded. The CSO figures show that, apart from share acquisitions in property groups, the UK pension funds, insurance companies and unit trusts last year spent £1.95bn on direct property investment, an increase of about £100m on the record 1980 level.

Together with other institutional shoppers for property, the combined total reached £2.2bn against £1.9bn in the previous twelve months. With most observers now expecting a much more cautious attitude towards property and investment and development during 1982, the CSO statistics indicate that the pace was slowing down in the final months of last year. During the year as a whole, it appears that the insurance companies invested more in the commercial property sector during 1981 while the pension funds reduced their investment programme. Insurance company investment climbed to £1.07bn against £853m in 1980 but pension

fund investment fell from £397m to £757m. Unit trust and property unit trust investment rose from £99m to £125m. It would be surprising to see the same buoyant investment pattern repeated in 1982. There is unlikely to be any substantial weakening in the funds' desire to purchase prime property when it becomes available or to continue to invest in carefully selected projects. But narrowing development margins are becoming the order of the day, heightening still further the need for selectivity and at least partially restricting an option which has accounted for a growing proportion of available investment funds.

Industrial rents 'set to rise again soon'

ZERO RENTAL growth, rock-bottom demand and acres of empty space in the industrial property sector have not managed to squeeze out every drop of optimism about medium-term prospects. That, at least, is the conclusion drawn after a visit to the Grosvenor Street offices of Hillier Parker May & Rowden, who clearly believe in thinking positive, irrespective of the present gloom. The agents have produced, for the first time, a forecast of industrial rents up until the end of 1984 and the results should cheer a few hearts. According to Hillier Parker, which concedes that its projections might appear optimistic and even to use its own description—"strange," the worst will soon be over.

The forecast, it should be emphasised, relates to modern industrial property only and it suggests that although rents will continue to stagnate up until the end of 1982 (they will rise by just over 7 per cent in the year up to this November) they will recover slowly through 1983 and 1984. The prospect, according to Hillier Parker, is for industrial rents in current prices to rise at an annualised rate of about 12 per cent over the three years from last November to the end

Grosvenor builds in Bournemouth

GROSVENOR Estate Commercial Developments will next year start construction of a £10m shopping complex in Bournemouth town centre. The property company has now acquired the site of the former Hants and Dorset Bus station in The Square, Bournemouth. The development will extend the town's existing shopping centre towards the new Conference Centre, now under construction. The retail scheme will take 2½ years to build and will provide 100,000 sq ft of retail space including restaurants, Edward Erdman and Fox and Sons are joint letting agents. Centrovincial Estates is understood to have paid figure approaching £4.5m for Northwest House, a 35,000 sq ft office block in London's Marylebone Road. The building was sold by limited tender, for clients of St Quintin. An asking price of more than £3.8m was sought. Centrovincial, which was advised by Pepper Angliss and Yarwood, intends to extensively refurbish the building to provide an office block of 45,000 sq ft. The Norwich City Council and the Carroll Group are to jointly develop a £15m business park for the Bowthorpe employment area. The phased scheme will provide 450,000 sq ft on 24 acres over an eight-year period.

Rohan steps into controversial scheme

ROHAN GROUP appears to have stepped on a few tender toes with its last-minute entry into an already controversial planning wrangle in Eastleigh, Hampshire. The Irish-based developers are proposing a £25m redevelopment in the town centre, but they are not alone in nurturing such ambitions. Existing plans to redevelop the centre by Taylor Woodrow and Sam Chippindale, the former Town & City man, have been around for some time and have been hit by lengthy delays. Problems have arisen in the form of objections to land acquisition by the local council and a public inquiry into their compulsory purchase orders is due to start on June 8.

It is somewhat surprising, therefore, that Rohan should have stepped in at this late stage with its own plans for a 300,000 sq ft development. Taylor Woodrow's scheme, which is supported by the local authority, calls for a 400,000 sq ft development on the same seven-acre site. Rohan believes that it may have stolen a march by provisionally agreeing terms to acquire two strategic parcels of land at the eastern end of the site. These are each of about one acre and are occupied by the Co-op and Peter Green, a furniture showroom. Both stores have opposed compulsory purchase orders by the local authority which has been assembling land in support of the Taylor Woodrow/Chippindale scheme. Rohan, which claims to have wide support from existing retailers in the area, says its scheme is less expensive and extravagant than is the Taylor Woodrow/Chippindale plan. Taylor Woodrow, however, refutes suggestions that its plans may prove more expensive and believes it will be able to attract a premium from retailers seeking to occupy a first class scheme. On this basis net costs might work out the same, or even cheaper than the Rohan scheme, says Taylor Woodrow. The joint venture partnership, Taylor Woodrow/Sam Chippindale, was formed only a couple of years ago. It looked an ideal marriage, with the financial muscle of Taylor Woodrow combining with the experience of Chippindale, who pioneered the concept of covered shopping complexes in Britain through his Arndale centres. The partnership, however, has been dogged by ill-fortune. It has so far taken on board four major retail schemes. Of these, a town centre development at Leicester has been scrapped. The other three schemes at Portsmouth, Rotherham and Eastleigh have been subject to lengthy delays because of the retail recession and planning problems. ANDREW TAYLOR

Jones Lang holds on to poll position

ESTATE agents may, like this column, be sceptical about the value of opinion polls, but there is at least one which tends to get their adrenalin racing. It is the British estate agents' survey conducted annually by Annual Investment File among the property directors and estate managers of some of the UK's largest companies. This year, over 450 companies made their views known and, as well as offering bouquets and brickbats to individual firms, they tendered a warning for the whole estate agency and surveying profession. The survey reveals that, for

the first time since it was established in 1978, the number of large companies employing estate agents on a permanent basis has fallen. Annual Investment File reckons that while, a year ago, 45 per cent of the country's top 3,000 companies maintained a continuing relationship with one or more agents, the figure has now fallen to just over 30 per cent. And so to the individual partnerships and their ratings. For the fourth consecutive year, Jones Lang Wootton emerges as the prime choice among respondents, while Hillier Parker May and Rowden move up from

third to second place. Third position is now occupied by King and Co., which has steadily moved up the league table. The remaining top ten positions, dominated by London firms, are—in descending order and with their 1981 positions in brackets—Healey and Baker (4), Weatherall Green and Smith (14), Gerald Eve (19), Richard Ellis (8), St Quintin (11), Eadon Lockwood and Riddle (7) and Fuller Peiser (10). Highest new entry was Lalonde Brothers and Parham from Bristol, which moved in at number 12.

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APPOINTMENTS

Senior position at Thorn EMI

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Mr. J. W. Dalman, property manager of BRITANNIC ASSURANCE is retiring on June 1. Mr. C. G. Raine, assistant property manager, will succeed him as property manager on June 7.

Mr. John E. Grandidge has been appointed deputy chairman of WESTERN SCIENTIFIC INSTRUMENTS. Mr. Grandidge, who is chairman and managing director of Negretti & Zambra (Aviation) has also been appointed chairman and managing director of Negretti & Zambra. Both these N & Z companies are direct subsidiaries of Western Scientific. The Zambra are being transferred to Western Scientific International, the group's marketing subsidiary. Mr. Malcolm Blair, a member of the parent board, will be the managing director of this subsidiary. Mr. David Bailey becomes finance director of the group board. Mr. Terence J. Adams, finance director of Negretti & Zambra (Aviation) has also been appointed to the board of Western Scientific Instruments.

Mr. Hugh G. Hespie, regional director of Lloyds Bank & Co. based in Leeds, has been appointed to the board of CAMREX (HOLDINGS) as a non-executive director.

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division has won a contract worth £1.6m from the Department of Transport, traffic control and communications division to design, manufacture, install and maintain for ten years a fibre optics based television surveillance system on a new 13 km section of the M25 motorway. The system is expected to be completed early in 1984.

An order worth more than £1m has been placed with TOWNSEND MATTHEY EQUIPMENT for hydrogen generating equipment of Ipari Serevelveny-eggegar, a tungsten carbide plant in Budapest, Hungary. The order is for a G30 hydrogen generator together with methanol/water fuel mixing systems and spares.

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Friday April 30 1982

WEST GERMANY'S CAR INDUSTRY

The scramble to catch Japan

By Kevin Done in Frankfurt

A Japanese door opens

WHEN IN Japan miracles are becoming harder to perform. The real growth rate of GNP in the 1980s was 11 per cent a year. In 1970-81 it was down to 6 per cent. Now the south-eastern Economic Planning Agency (EPA) of the Japanese government are forecasting 4 per cent for the rest of the century.

By the standards of the older industrialised countries that is still a very good trend line. But it is no longer as high as the EPA document has yet to disclose. So we do not know whether the main sources of growth are expected to lie. But it would be surprising were they not to be in the areas of advanced technology and of export markets.

The rest of the industrialised world must be prepared for a continuing onslaught from its Japanese competitors. The experience is bound to be painful, but need not be disastrous, provided the challenge to match Japanese efficiency is picked up.

Appreciation
As we have often argued, protectionism is not the road to that objective. Even the increasingly frequent self-restraint agreements entered into by Japanese exporters ought to be no more than temporary stop gaps to meet acute crises.

As has long been recognised, part of the answer—but only a part of it—lies in a more generous opening of Japanese markets to imported goods. The authorities in Tokyo themselves have shown some appreciation of that fact. They have cast about for means of import promotion, though it has never been easy to know how much value to attach to these efforts and promises.

It is therefore wise to look sceptically at this week's proposals from the Keidanren, the Japanese Federation of Economic Organisations, for a more liberal attitude to imports. Officials of that powerful body themselves appear to harbour some doubts as to how readily the Government will fall in with their plans. They also said that they would return to the charge if necessary.

The Keidanren proposals are for phasing out what is left of the import quota system, and for some lowering of tariffs. More important, the Keidanren called for a simplification of the notoriously complicated import

approvals procedure which is seriously regarded as the most generous non-tariff barrier.

If the Keidanren, or rather its individual members, really mean business, the significance of the proposals extends beyond such measures. Nothing could advance the cause of exporters to Japan more than an increased willingness of Japanese industry and its big trading companies to look more favourably upon foreign products.

Japan is coming up against the fact that trade cannot be a one-way street. A bankrupt customer ceases to be a customer. That realisation seems to be spreading in Japan.

Improbable
But far deeper influences may be at work. It would be against all the lessons of history to assume that the Japanese "miracle"—if miracle it be—must go on forever. Consensus and company loyalty are far more deeply embedded in Japanese society than in any American or European society. But it seems intrinsically improbable that Japan will forever remain immune to the forces that industrialisation has released elsewhere.

That need not take the form of worsening labour relations. But unless one assumes that peoples have unchanging national characteristics, pressures will increase in Japan, as elsewhere, for more leisure and for rising private consumption. Once consumers demand a greater share in the national cake there has to be an impact upon the savings quota, which is extremely high in Japan; on imports; on exports; or on all three.

Proficiency
The increasing inclination of Japanese industry to transfer some of its production into the newly industrialised countries of Asia may signify that the process has already gone further than is immediately apparent from Japanese trade surpluses. Yet it would be foolish to bank on it in anything but the very long run. If Europe and America cannot pull themselves together to match Japanese industrial proficiency, they will continue to suffer defeats in world markets and may not even be able to take advantage of a more liberal Japanese import regime, once it comes.

Prescription for electronics

THE NOTION of a positive industrial policy, involving selective government support for specific industries, products and companies, is still very much alive in the UK. It is based on the belief that such policies have been successfully used by other countries, notably France and Japan, to improve their industrial performance. The National Economic Development Office is a strong advocate of these ideas, which form the central theme in a report just issued by the Economic Development Committee for the electronics industry.

The report argues that UK manufacturers, unlike the Japanese, have "failed to exploit the advantages of volume production through the achievement of significant shares of world markets." The industry is spread too thinly over too wide a range of technologies and products; the report recommends a concentration of resources on selected business areas, including information technology systems and related high-volume products.

As a stimulus to thinking and planning within companies, the report should serve a useful purpose. As a prescription, it is rather more questionable. The aim set out in the document is to develop a planning system in which industry (including trade unions) and government can work together to build up the international competitive position of British electronics companies. The guiding principle is selectivity: harness the efforts of public and private sectors behind selected companies and products.

Priority
Public procurement, for example, should be used to support "specific products and technologies which both government and industry consider to be of strategic importance." Government support for research and development should be brought under more unified control; priority should be given to "firms where R and D funds are most likely to be fully exploited in international markets in the light of the Government's past record." Broad-

based sectoral aid schemes under the Industry Act are inappropriate "because of the even-handed application of the funds." "Single market leaders" should be identified and future government assistance schemes should take the form of individual project funds.

The stress on selectivity extends to inward investment. Assistance to potential foreign investors should be directed towards filling gaps in the country's product range, in return for "specific and binding agreements relating to export content and components."

Prospects
Like so much discussion of industrial policy, the report relies too heavily on misleading comparisons with foreign countries and fails to draw the right lessons from the UK's past experience. There is no evidence that tripartite official committees are better placed than individual companies to select products and technologies with the best growth prospects. The record of agencies such as the Industrial Reorganisation Corporation and the National Enterprise Board does not inspire much confidence in a policy of selective intervention. Even in France, where the government-industry "interface" is well-established, the results of sectoral planning and selective intervention are patchy at best.

Our strong preference is for general, rather than discriminatory, policies to encourage research, innovation and entrepreneurial effort; in electronics, especially, there are ample opportunities for small, dynamic companies of which there are some encouraging examples in the UK and which are unlikely to emerge as a result of sectoral planning. Yet the philosophy underlying the EDC report has wide support—in parts of industry, among civil servants and even among ministers. Because this approach sits uneasily with the Government's belief in market forces, policy towards industry tends to be a mixture of the selective and the general, thus ensuring the worst of both worlds. It would be useful to know whether the Government supports the EDC's proposals.

RECESSION in the West German car market and the stock of the Japanese challenge has released a wave of activity in the Federal Republic's automobile industry, which is threatening to make West Germany, rather than Japan, the new bogey-man of the European car market.

"The French are saying 'We protected our market against the Japanese and you are using the opportunity to launch a blitzkrieg against us,'" admits Dr Gerd Ehrmann, head of Volkswagen's marketing strategy.

With the home car market still suffering from shrinking demand and unable to shake off the general mood of pessimism that is dogging the domestic economy, German car makers have launched an export offensive which allowed them to raise car production by no less than 17 per cent in the first three months of this year—despite a drop of 7.3 per cent in domestic new car registrations. Exports jumped 25 per cent in this period.

The success of the German export drive is put into some perspective when the industry is compared with its major rivals. In 1981, a year when most major car markets were suffering from depressed demand, German vehicle production managed a tiny rise while French output dropped by 11 per cent, Italian by 9 per cent, British by 12 per cent and U.S. by 1 per cent.

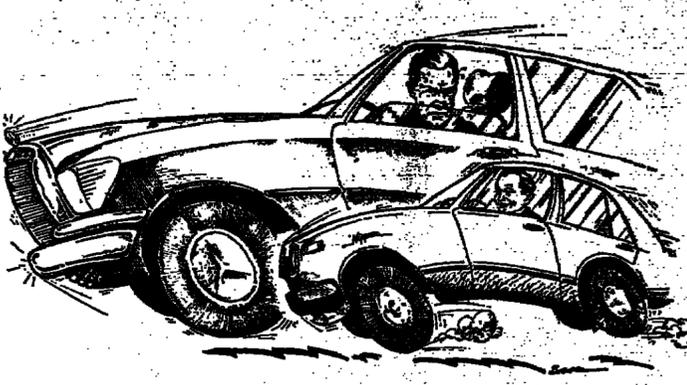
The success of the export drive over the last 18 months, helped at the beginning by the

	1981	1980
Total volume	9,047,338	9,293,164
Volkswagen	13.4%	12.6%
Peugeot/Citroen		
Talbot	12.9%	14.4%
Fiat	13.4%	12.8%
Renault	12.7%	13.6%
Ford	12.1%	10.8%
Japanese total	9.5%	10.1%
General Motors	8.7%	9.2%
of which Opel	7.3%	7.7%
B.	4.3%	4.1%
BMW	2.8%	2.7%
Daimler-Benz	3.5%	3.4%
Others	6.4%	6.3%

* Italy, France, UK, Belgium, Austria, Netherlands, Switzerland, Sweden, Norway, Denmark, Finland and West Germany. Source: Volkswagen

relative weakness of the D-Mark has already set some German motor industry leaders thinking about the need for voluntary restraint so as not to sour relations with such potentially "touchy" neighbours as France and Italy.

Equally, campaigns in Italy encouraging consumers to "Buy Italian" are monitored with some nervousness at the headquarters of the West German Motor Industry Federation. While much attention in recent years has focused on non-tariff trade barriers against car imports into the Japanese domestic market, the West German motor industry argues that the French and Italians are past masters at



Stans Radovic

introducing such hurdles to stifle imports when necessary. West German car makers have been forced to boost their competitiveness and fight for a bigger share of foreign car markets partly by the abrupt ending of a five year boom in car demand in the Federal Republic and partly by the suddenness of the Japanese onslaught on the West German market.

German automobile producers were already in the process of gearing up investments to produce the models needed in the wake of two oil crises, but the Japanese arrival in force helped to concentrate the mind. According to Daniel Goedevert, Ford-Werke's French chief

executive, the European motor industry started off after the first oil crisis in 1974 like a long-distance runner in a race to restructure the industry by 1984. The arrival of the Japanese, still fresh in the races in 1978 turned the final stages into a sprint finish over hurdles.

For the moment at least German competitors appear to have gained their second wind. The sector's ambitious capital investment programme to modernise and streamline production and to develop new model ranges appears to be paying dividends. Capital spending is expected to rise to DM 8.3bn this year from DM 7.2bn in 1981, DM 6.2bn in

1980 and DM 5bn in 1979. German car makers have been helped to beat back the Japanese in European markets by some external factors—chief among them the appreciation of the Japanese Yen against the D-Mark, which forced Japanese exporters to implement hefty price increases in late 1980 and early 1981, undercutting their sales arguments about offering more car for less money.

But the German car industry has also reacted swiftly to the Japanese success in offering better equipped basic models. In mid-1981, for instance, Volkswagen added equipment worth DM 1100 to the Golf, while only raising the price by DM 350.

In the first three months this year the Japanese share of West German new car registrations dropped to just 3 per cent compared with 10.4 per cent in the same period last year.

The fight-back has not been achieved without cost. The probability of the German motor industry has plummeted as the twin forces of Japanese competition and recession have begun to bite. Opel has run up losses of around DM 1bn in just two years, Ford had losses of DM 480m in 1980 and the Volkswagen group dropped into loss for part of last year.

As Ferdinand Schwegler, Opel board member for finance, admits ruefully: "Our cars have to be sold so cheaply, or else we would not be competitive in the market."

Opel, like other German manufacturers, is laying great store on boosting exports this year to other West European markets.

In the three major European volume markets of France, Italy and the UK, German car producers boosted sales by more than 100,000 units last year with growing market shares. The success was not confined however, to markets which are protected by limits on Japanese imports.

The German drive is unlikely to falter in the near future, with a number of important new models due to be launched in the next 18 months. A stream of Japanese success in offering better equipped basic models. In mid-1981, for instance, Volkswagen added equipment worth DM 1100 to the Golf, while only raising the price by DM 350.

Volkswagen and the parable of the fat runner

"IN TERMS of manufacturing techniques Volkswagen compares with the average of Japanese industry. We are better than the worst and in three to four years we will be good as the best. They are no longer building new plants and we are coming with our big investments."

Gunther Hartwich, for nearly ten years the Volkswagen director responsible for production, is under no illusions that the West German car industry will ever match the economy of Japanese production. "If I have the same machines making the same parts my costs will always be higher than the Japanese."

West German workers work shorter hours and cost more to employ. According to VW figures, Japanese car workers were putting in annually around 2,150 hours last year. At Volkswagen the number of hours worked dropped in 1981 to 1,623 from 1,603 the previous year. The additional social costs paid by VW per worker were equivalent to 100 per cent of the direct wage. In Japan extra social costs added only 40 per cent to the wage bill.

"We must compensate through other advantages," says Herr Hartwich. "Through capital investment we must achieve a higher level of mechanisation than the Japanese."



Gunther Hartwich, Volkswagen Board Member for Production: "Through capital investment we must achieve a higher level of mechanisation than the Japanese."

ing itself from being virtually a single-product company—the rear engine, air-cooled "Beetle" to a car offering a complex range of front-wheel drive models with transverse-mounted engines.

Where VW is now catching up is in universal production areas, which do not change with new models: the press shops, body shell assembly, paintshops and final assembly.

Since 1973 Volkswagen has been spending DM 350m on modernising the press shops at its main works at Wolfsburg, the VW company town. By 1985 the average age of the presses will have been reduced to 10 years and the number of machines will have been cut by 30 per cent, with considerable increases in efficiency.

In terms of manufacturing efficiency VW has been improving its technical productivity annually by about 3-3.5 per cent in recent years, but the current ambitious investment programme is supposed to boost this to around 5 per cent a year.

Even with such technical gains, however, Herr Hartwich admits that VW has slipped back in overall productivity. The technical gains have been more than eaten up by the increase in the complexity of each car produced—more man-hours are needed per unit, even though the extra quality is reflected in higher prices—and by concessions made to the labor force in improved working terms and conditions.

Changes in the press shops in Wolfsburg should bring a reduction of 500 in the 1,500 workforce. In other parts of the manufacturing process VW is well ahead with the introduction of robots as part of the push for greater automation. Some 800 robots should be in use by the end of 1982 and the total should rise to at least 2,000 by the end of the 1980s.

Such investments clearly save jobs, but labour agreements wrung out of VW by IG Metall, the car workers' union, have offset these gains. A new wage agreement introduced in stages up to September last year added an extra 16 minutes paid rest

time to the existing 46 minutes per eight-hour shift. Less hours has meant more jobs, with VW having to hire an extra 2,260 workers in Wolfsburg alone.

The chief pain for VW in its growing automation is not direct labour-saving, but the huge increase in manufacturing flexibility offered by modern techniques of robots and computer control. "Beetle" production was highly mechanised—98 per cent of spot welding was automatic—but totally inflexible and needed very high volumes with daily production of at least 1,500 units.

Today automation is attractive for an output of only 500-1,200 units a day and robots can be re-programmed for other duties rather than being scrapped when model runs end. Herr Hartwich sees the German motor industry as a fat runner, with a timetable for slimming, pursuing a thin one.

"The fat runner can shed 10 pounds easily just by not eating, but the thin one might hardly be able to run if he loses that much weight."

The question still to be answered is whether the shock of realising how fast the Japanese can run will be enough to make the German competitor a disciplined and permanent weight-watcher.

Men & Matters

Holiday pay

Being with the Task Force in the stormy South Atlantic is no holiday. But many hundreds of men on board are anxious about the summer holidays they booked in good faith before sailing, and which must now be considered in jeopardy.

Travel agents in the naval bases of Portsmouth and Plymouth, and the various military centres, are handling a stream of inquiries from anxious wives and dependents of men who paid deposits on package holidays.

Most of them are being readily reimbursed by holiday companies and travel agents anxious to show goodwill even if a little commission has to fall by the wayside.

But Thomson Holidays, one of the biggest tour operators, is referring difficult cases to the Ministry of Defence.

took out insurance through Thomson's own insurers, Norwich Union, will get their money back even though strictly speaking going off to war is not one of the risks covered by the policy.

However, those who booked holidays with Thomson but did not avail themselves of Norwich Union cover are being advised to claim from the Ministry of Defence.

I telephoned the Ministry. "Well, yes," said a helpful Captain, "a scheme to reimburse personnel for cancelled holidays was devised about a year ago. But we are not quite sure how it will work."

The Ministry is debating whether to repay holiday deposits, or take a gamble that the Falklands engagement will be a short, sharp affair which will get the lads home in time to enjoy those Mediterranean beaches.

Bank guard

Robin Hutton, the new director general of the Accepting Houses Committee, belongs to the small band of bankers that has fitted back and forth between the City and public office.

He first came into view in 1970 when he left Hambros Bank to join the Heath Government as a special adviser. His baptism of fire was gained during the bankruptcy of Rolls-Royce, an affair in which neither the City nor the Government particularly distinguished themselves.

In 1973, Hutton was whisked away to the European Commission where he became director of financial institutions. During the five years he spent in Brussels before returning to the City as a director of S. G. Warburg, he is credited with bringing some flexibility into the more rigid pieces of EEC banking legislation.

His expertise in European financial politics is one of the reasons he is now being recruited to run the trade association for the City's top merchant banks. They have always prided themselves on being the guardians of the City's self-regulatory methods which are now under attack.

Beck and call

"In a television democracy," said West German Chancellor Helmut Schmidt, "every politician appears as he really is in the long run." Government public relations, he added back in 1974, could not compensate for policy failings and party bickering.

The quotes were recalled with some irony in Bonn this week as Schmidt dropped his government to a spokesman Kurt Becker for failing, it is said, to reflect clearly enough the merits of his political masters.

The truth is that Becker reflected them all too well—Schmidt's Left-Liberal coalition looks increasingly shaky and the Chancellor's own popularity is sinking fast.

Though not a member of the Social Democrats (SPD), Becker was pressed to take the spokesman's job 16 months ago. For years, Schmidt said he had valued Becker's independent advice as well as his regular articles in Die Zeit, one of Germany's leading newspapers.



ALFRED THE PRESIDING BARMAN AT LONDON'S CALEDONIAN CLUB is usually surrounded by ex-patriate Scotsmen who have formed their own ideas on their favourite Scotch whisky.

But he well remembers one occasion when a visiting Texan asked him for a glass of the best whisky in the house. Alfred pursed his lips and moved along his bottles like an alchemist seeking the Philosopher's Stone.

Finally he stopped, extracted a bottle full of a deep amber-gold elixir and poured a generous measure for the fortunate American.

"There it is," he said. "A 15-year old Macallan malt. I doubt ye'll find better."

"Well, thank you very much," said the American. "And I'll have an American Dry Ginger to go with it."

To say that Alfred blenched is a grotesque understatement. He reeled (in the English sense). But when he had finally recovered, he took the glass from the astonished visitor's hand, poured him an ordinary blend and sloshed in the offending effervescence.

"There you are," he said. "Y'may as well have that one. I'll no be a party to defacing historic monuments."

THE MACALLAN THE MALT
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Watch out

When time not only marches on but passes you by, the consequences can sometimes be disastrous. Especially if you are in the time business itself.

So it was for the British watch and clock industry which was all but wiped out by cheap, reliable, mass-produced imports from Switzerland at the turn of the century.

Observer

LATIN AMERICA AND THE FALKLANDS

Bankers freeze in their tracks

By Peter Montagnon, Euromarkets Correspondent

IT COULD be said with justice that international banks have nothing to lose in the Falkland Islands. They are, according to the Bank for International Settlements, one of the only two "countries" in Latin America which have no commercial bank borrowings at all.

But this small fact is cold comfort to the hard pressed banking community as the prospect of military action on the islands themselves seems to draw closer.

In the backlash of the Argentine seizure of the Falkland Islands on April 2 alarm and despondency has been spreading through finance ministries and banks in most of Latin America. Medium term bank lending on which the continent heavily depends has all but dried up and the daily routine of bankers whose job is to supervise some \$170bn in South American loans has taken on an almost nightmarish quality.

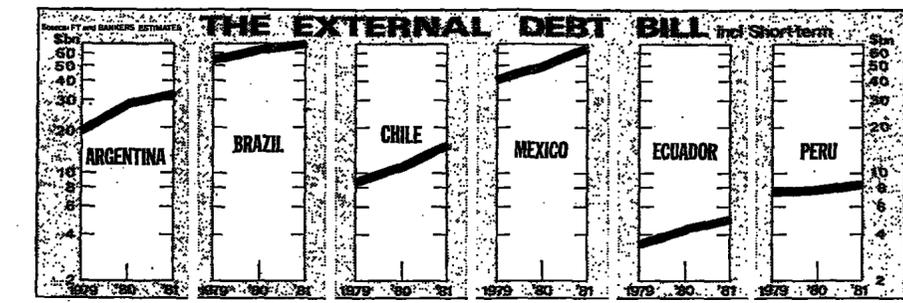
One of the deepest fears of the Eurocredit market has always been payments difficulties by a really large borrower country. Argentina, whose total foreign debt is about \$32bn, is just such a borrower and its financial isolation following the Falklands crisis means that its ability to go on servicing this debt may now be very limited indeed.

A loss of confidence greater than over Eastern Europe

Like a rabbit caught caught in the headlights of an oncoming car, the credit market has frozen dead in its tracks and they wait for the next twist in the story some bankers are beginning to wonder whether things will ever be the same again.

This is not just a question of the immediate impact of the UK's decision to freeze Argentine assets in London. The very fact that Argentina chose to move on the Falklands at all has reopened the debate on its medium term economic and political future.

Even bankers from countries not involved in the conflict do not like what they see, and their immediate reaction has



been to stop new loan commitments. In a similar way other countries in Latin America, especially those close to Argentina like Chile and Uruguay have been placed under fresh scrutiny.

At the very least, the Falklands crisis seems likely to add to the serious financial squeeze on Latin America. At worst it could conceivably engender a loss of confidence in the banking system far greater than has already occurred in Eastern Europe. Eastern Europe's debts to banks—at some \$80bn—are less than half those of Latin America.

International banks have never been particularly confident of their ability to gauge political risks and a key issue now is whether other Latin American nations may be sucked into the conflict.

Bankers who travel the region understand that there are distinct economic differences between the various countries they visit, but they also admit that it is very hard to convince senior management at home

"It would be wrong to tar the whole of Latin America with one brush," says one. "but the closer you get to Argentina the more difficult things become." Even Chile, which opposes Argentina, has become a no-go area just at a time when it is in the grip of a deep recession.

In this climate there is little enthusiasm for a new loan proposal by Venezuela to be discussed with international banks at a meeting in Caracas today.

Venezuela has already declared its support for Argentina in the Falklands dispute and British banks will not be attending the meeting. While Venezuelan officials claim to have invited two of them, no British clearing bank will admit officially to having been asked and an atmosphere of distinct chill has been growing.

The upshot for all these countries is likely to be increased reliance on volatile short-term borrowings. This will make their debt harder to manage as they become increasingly vulnerable to sudden financial shocks.

In absolute terms lending may also contract, forcing further deflation on countries already labouring under the world recession.

The Inter-American Development Bank calculates that economic growth rates in Latin America as a whole slipped to 1 per cent last year, the worst performance in 20 years and

not nearly enough to maintain the living standards of the region's rising population.

The search for high growth rates to offset this rise in population is an important reason for the rapid increase in their debts. In the three years to September 1981 their gross borrowings from international banks increased by more than \$30bn to \$168bn according to the Bank for International Settlements.

Now they find themselves with a gigantic interest rate burden—a 1 per cent swing in U.S. interest rates makes a

difference to the balance of payments of the two largest borrowers, Mexico and Brazil, of more than \$400m.

As a result their balance of payments have deteriorated rapidly. Last year, according to the Inter-American Development Bank, Latin American countries ran a combined current account payments deficit of \$34bn compared with only \$27.4bn in 1980.

This year, says the bank's president, Sr Antonio Orúz Mesa, there is little prospect of relief as the recession in developed countries limits the

GDP AND CURRENT ACCOUNT

	GDP—Real % Increases			Current account balance (US\$m)		
	1979	1980	1981	1979	1980	1981
Argentina	10.5	-1.0	-4.5	-572	-4,255	-3,824
Brazil	6.7	7.9	-3.5	-10,077	-12,180	-10,600
Chile	8.5	6.5	4.0	-1,189	-1,971	-4,800
Ecuador	5.8	4.8	4.4	-4,551	-4,594	-11,704
Mexico	6.0	7.4	8.1	-585	-770	-1,050
Peru	3.8	3.1	2.9	619	117	-1,050
Venezuela	0.9	-1.2	0.3	350	4,241	2,821

Source: FT and bankers' estimates

this year range up to \$30bn as it struggles to cope with soaring inflation, a declining oil price and a very weak currency.

Put in context these estimates mean that Mexico could need to borrow more in a single year than the whole outstanding debt of Poland. Mexican officials insist that the actual total will be lower at around \$20bn but there are already signs that a desperate quest for cash has begun.

Few bankers are prepared to predict what could happen if the Falklands crisis drags on. In Britain the largest exposure to Argentina and Latin America in general has probably been notched up by Lloyds Bank, but what is clear is that the brunt of any serious banking problems would fall on U.S. banks.

Federal Reserve Board figures show that last November U.S. bank loans to Latin America and the Caribbean totalled \$112.9bn, \$20bn more than at the end of 1980.

At the end of last year Citibank's total assets in the Caribbean, Central and South America totalled \$18.19bn. This compares with \$8.6bn at Manufacturers Hanover.

Western hemisphere lending outside the U.S. by Morgan Guaranty totalled \$6.5bn at the end of last year. The comparable figure for Chase Manhattan was \$15.2bn and for Bankers Trust \$4.3bn.

One school of thought in the international banking community maintains that even lending on this scale is still too small to pose a threat to the banks concerned. The banking system is still far more vulnerable to a crisis of confidence emanating from the foreign exchange and money markets.

But international lending is also a matter of confidence, other bankers argue and, with figures as large as this, maintaining confidence will be an uphill struggle if things do go badly wrong in Latin America.

But bankers are much less sanguine about Mexico whose problems will remain even after the Falklands dispute is eventually settled. Pessimistic estimates of its borrowing needs

are still in the region of \$20bn to \$30bn.

Moreover Brazil also seems to have escaped the financial quarantine now being imposed on other countries. Its latest loan, for the state oil concern Petrobras, is being increased to \$350m from \$300m.

Brazil has, however, also earned the respect of the international banking community by its determination to eschew short term borrowing and bring its balance of payments under control.

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Lombard

Alliance squeezed by the Falklands

By Peter Riddell

ONE OF the most striking domestic results of the Falklands crisis has been to raise doubts about the immediate prospects of the SDP/Liberal Alliance. A month ago the Alliance had just won the Hillhead by-election and was ready to launch a major drive in its first nationwide test at the local elections on May 6. But now its standing is slipping with each new opinion poll.

In part, the problem is that the Alliance, its activities and aspirations, have been pushed off the front page by the Falklands. The SDP, in particular, has depended for its electoral success in the last year on a high public profile which has made it appear as a plausible alternative to Labour and the Tories. This has been a circular process in which media attention has helped to generate success. But the Alliance has now been robbed of this attention.

Discussion of the Falklands has been concentrated on the Government and the main opposition party. This is partly because House of Commons procedure at present works against minority parties.

The public mood appears to be highly volatile and Tory support could plummet if the expedition is regarded as a failure. Experienced canvassers also report an unusually large number of "don't knows." Some SDP leaders expect patchy results, depending on local campaigning and the extent to which Labour councils have swung left.

It would be wrong to exaggerate the importance of next week's elections. Any squeeze on the Alliance's support could be temporary. After all, Labour's division could soon re-emerge with the report on the Militant Tendency coming soon and Mr Bob Mellish's expected resignation as an MP threatening a bitter row. The Tory position is highly dependent on the outcome of the crisis.

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Letters to the Editor

The banks and international lending policies

From Mr J. Whitley
Sir,—Mr T. Clarke (April 23) puts a view of international banking which is by no means uncommon. While not wishing to characterise banks as paragons of virtue, the following observations may improve to some extent Mr Clarke's rather jaundiced view of the banker's world and the international debt problem.

Prior to the early 1970s balance of payments surpluses and deficits were largely financed by flows of official aid and direct investment. With the advent of the first oil shock in 1973-74, the banks stepped into the breach and recycled the very large surpluses now accruing to the oil producers (Opec) to the deficit countries, which needed to finance their increased oil import bills. This did not mean that deflationary pressures were wholly avoided, but undoubtedly even greater deflation would have been necessary had the international banking system not responded flexibly to the new challenge.

It has been alleged by the Bank for International Settlements, for example, that "instances have occurred in the past where banks clearly overlent to certain countries whose payments deficits were obviously unsustainable." It is, of course, easy to be wise with hindsight. If banks have been unwise, so too have governments who lend often for political rather than economic reasons—and sometimes attempt to pressurise the banks to lend on these political criteria.

The size of a country's international debt—which has been eroded by inflation—is not a problem unless the country

concerned cannot service that debt. If, for example, it hits cash flow problems—which may be increasingly likely due to the need to pay high real interest rates on debt contracted at floating, and not fixed, rates—a rescheduling agreement is normally worked out, whereby the debt is paid but later than anticipated. Perhaps more serious is the possibility that a country may take a deliberate political decision to default on its debt in preference to paying it back. This, however, has not yet been experienced by the banks and the loan loss record on international lending has been better than a domestic lending.

A bank will not lend to a customer unless it believes the loan will be repaid and they are improving constantly their systems for assessing whether and how much to lend to whom. Banks are, however, in the business of taking risk in order to make a profit (just as shareholders are when they buy an equity stake in any company)—risk which, in the earlier part of this century and previously was borne by unsuspecting individuals who took up bonded debt. Banks may not always correctly assess country risk, but they are much better equipped to try than private investors.

This is not to say that many criticisms of the banks are invalid. It is vital that banks continue to assess and improve their operations; other types of financing should be fully explored. But borrowers also undertake obligations and responsibilities. A defaulting borrower would not be able to return to the banks for a long, long time if ever, and debt has

always been a crucial factor in development. Jackie Whitley, 15 Oakdene Road, Sevenoaks, Kent.

Floating charges

From the Managing Director, Control Technology
Sir,—I would like to continue the debate on bank lending policy with a specific example of discriminatory practice. As a small company wishing to purchase the freehold of our premises via our bankers, they insisted not only upon a floating charge over the company's assets including the property deeds, but also upon the personal guarantees of the directors. For this "service," where incidentally asset cover provided by the company is approximately 3:1, the bank charges 2½ per cent above base rate.

Contesting this rate in relation to the facility offered to private individuals, I received the following reply from our bank: "I understand your concern that our home loan rate for personal borrowers is at present lower than the rate being charged to the company, but this product is for a special market and has to be competitive to succeed." By implication and contrary to recent bank publicity, it would appear that small businesses are neither a "special market" nor is there the need to provide the stimulus of competitive rates. Clive Nottingham, Control Technology, Bolney Avenue, Peacehaven, East Sussex.

Agricultural production

From Mr E. Read
Sir,—John Cherrington (April 23) once again highlights the problems of the Common Agricultural Policy and argues the ineffectiveness of some of the proposed reforms. He has taken the bull by the horns and suggested a more radical but commonsense solution to set arid-land which is producing structural surpluses. I am in wholehearted support of his proposal though as a flour miller it might seem against my interests. I do not, however, want to be able to buy cheap wheat just because a support system is encouraging overproduction—when the grain is in the case of some export countries a very expensive product.

I am sure that there is a major psychological barrier to be overcome before any real progress could be implemented and in any case this must be seen in a European context and not just as they would affect us in the UK. I suggest that there is one step which could and should be taken immediately: both to give public money and in the interests of conservation of the countryside. I am referring to the payment of grants to the Ministry of Agriculture, Food and Fisheries in order to be commensurate to the amount of land which is being converted to growing more wheat.

As a conservationist particularly interested in the preservation of the wetlands of the Fens, I am concerned that at the moment we have a situation where allocation is being made for grants to improve the drainage of large areas of marshland in that much of the land can be converted to public farming giving all the benefits of the wetlands. It is time that Government action was stepped up and the amount of money available to the Ministry of Agriculture, Food and Fisheries was increased to provide an overriding obligation to increase agricultural production is replaced by one which both assesses the environmental effects of a grant and considers whether in the short term the additional production is justified—not just that the scheme is cost effective. This should ensure that some land of ecological and landscape value is not taken into cereal production, at public expense, to produce commodities which are in surplus.

Bryan C. Read, PO Box 9, City Flour Mills, King Street, Norwich.

Was the design by Mies van der Rohe?

From Mr John Harris
Sir,—Messrs Rogers, Foster and Stirling have defended (April 22) Mies van der Rohe's design for the Mansion House tower, and in so doing evoke qualities of timelessness and Hellenism for what they believe will be a masterpiece in the sense of elevating the spirit. They are deluded, Sir, for in this matter of tower blocks there is only one masterpiece by Mies, namely his Seagram building of 1957. Just as there can be no two Parthenons, so there is only one Seagram. The Parthenon is in Athens, the Seagram in New York. Neither has had to be transported to London to act as lodestones. The Mansion House tower will be what it is: an inferior version.

Your correspondents make much of the tower having been designed and detailed both inside and out by the late master. To my simplistic mind this implies actual drawings by Mies, and not by assistants in his office. As not a single original drawing has ever been seen, neither at the Royal Exchange in 1988 nor at the RIBA this year, I am beginning to wonder if the claim is spurious. John Harris, 18 Limerston Street, SW10.

Directors' equity interests

From Mr J. Penzill
Sir,—Mr J. Hood (April 22) raises the hoary old problem of directors' qualification without considering fully the implications. As chairman of a company

I would not wish to be handicapped in recruiting the best expert brains and experience to my board by insisting that the individual concerned must, as suggested by Mr Hood, invest what would be a considerable part of his savings in the company's shares.

It is becoming more usual for the articles of association of companies to provide that directors need not have a shareholding as the shareholdings previously prescribed were generally only nominal. The fact that some directors do not have stakes in their companies, commensurate with their remuneration may be due to many factors, but least of all I would suggest to lack of confidence in the business they

control. S. W. Penzill, London International Press Centre, 76, Shoe Lane, EC4.

Trade Development Bank Holding S.A. Luxembourg

NOTICE IS HEREBY GIVEN that the Annual General Meeting of Shareholders of Trade Development Bank Holding S.A. (TDB Holding) will be held at the registered office of the Company, 34, Avenue de la Porte-Neuve, Luxembourg at 2.30 p.m. on 11th May, 1982 for the purpose of considering and voting on the following matters:

1. Approval of the Chairman's Statement, the Statutory Auditors' report and the unconsolidated financial statements of the Company for the year ended 31st December, 1981.
2. Discharge of the Directors and of the Statutory Auditors concerning their duties relative to the year ended 31st December, 1981.
3. Appropriation of US\$ 1,580,000 to the legal reserve, distribution of a dividend of US\$ 1.40 per share and the carrying forward of the balance of the profit.
4. Election of the Board of Directors and of the Statutory Auditors for 1982. All the Directors are eligible and stand for re-election.
5. Approval of the consolidated financial statements of the Company for the year ended 31st December, 1981.

By Order of the Board,
Edmond J. Saffa,
Chairman

NOTES:

Subject to the relevant resolution being approved, the dividend will be payable on 1st June, 1982: (i) in respect of registered shares to shareholders on the register as at 1st May, 1982 and (ii) in respect of bearer shares against surrender of Coupon No. 10 to any of the Paying Agents listed below.

Any shareholder whose shares are in bearer form and who wishes to attend the Annual General Meeting in person must produce a depositary receipt or present his share certificates to gain admission. If he wishes to be represented at the meeting, he must lodge a proxy duly completed together with a depositary receipt at the registered office of TDB Holding at 34, Avenue de la Porte-Neuve, Luxembourg, not later than 10th May, 1982 at 3.00 p.m. The shareholder may obtain the depositary receipt and, if required, the form of proxy from any of the banks listed below by lodging his share certificates at their office or by arranging for the bank by whom his certificates are held to notify any of the banks listed below that the shares are so held.

- *Manufacturers Hanover Limited, 8 Princess Street, London EC2P 2EN.
- *Banque Internationale à Luxembourg S.A., 2, Boulevard Royal, Luxembourg.
- *Manufacturers Hanover Bank Belgium, 13, Rue de Liège, 1000 Brussels.
- *Manufacturers Hanover Banque Nordique, 20, Rue de la Ville-Evêque, 75008 Paris.
- *Manufacturers Hanover Trust Company, 40 Wall Street, New York, N.Y. 10015.
- *Manufacturers Hanover Trust Company, Bockenheimer Landstr. 51/53, Frankfurt.
- *Republic National Bank of New York, 452 Fifth Avenue, New York, N.Y. 10018.
- Trade Development Bank, 23, Corso S. Gottardo, 68030 Chiasso, I.
- Trade Development Bank, 21 Aldermanbury, London EC2P 2BY.
- Trade Development Bank (France) S.A., 20, Place Vendôme, 75001 Paris.
- Trade Development Bank (Luxembourg) S.A., 34, Avenue de la Porte-Neuve, Luxembourg.
- Trade Development Bank, 2, Place du Lac, 1204 Geneva.

*Paying Agent of TDB Holding.

UK COMPANY NEWS

M & S profit expands by 22.6%

WITH THE announcement of results for the period ended March 31 1982, showing a 17.4 per cent rise in sales to almost £2.2bn and a 22.6 per cent increase in pre-tax profits to £22m, Marks and Spencer has revealed that a professional revaluation of its UK properties has thrown up a surplus of £97.7m which has been credited to reserves.

In the UK stores sales increased by 18.5 per cent, in Europe by 30.9 per cent and in Canada by 32.3 per cent. The results this time cover M & S and its European subsidiaries for the year to March 31 1982, and the Canadian subsidiary for the year ended January 31 1982. The figures take in 53 weeks ending (against 52), except in Canada (52 against 53) and in Europe (52 for both years).

Year earnings per share for the year are shown to be ahead from 9.22p to 9.22p, and the dividend is lifted from 3.9p to 4.6p net, with a final of 3.55p.

The profit was struck after a chargeback of £22.7m (against £19.1m), and allocation to employees' profit sharing scheme of £2.2m (£3.2m). Depreciation is based on the book values of properties at

HIGHLIGHTS

Lex looks at the surprisingly good results from Marks and Spencer. Volume growth has been accelerating and profits for the year have jumped by close to £1m to £22.2m pre-tax. ICI meanwhile has produced a disappointing first quarter result with pre-tax profits of £62m against £52m in the comparable period—well below outside expectations. Most of the sluggishness is due to very weak oil prices which the company has been unable to use to improve oil product margins. Finally Lex considers the implications of Great Universal Stores' latest move of stepping into the market and building up its share holding in Empire Stores to 29.9 per cent. Other major news of the day was the appointment of receivers at Birmingham and Midland Counties Trust—the master company of Graham Ferguson Lacey and a substantial shareholder in NCC which was suspended earlier this week.

at the beginning of the year, without any adjustment for their revised values. The allocation to the profit sharing scheme represents 4.3 per cent of the salaries of those eligible. Results of overseas subsidiaries have been consolidated using exchange rates ruling at the end of each year. While European rates are broadly similar to last year, the Canadian figures are distorted. Expressed

in local currency the Canadian sales are 8.9 per cent higher, but profits before tax are 14.2 per cent lower. The European profit is arrived after deducting pre-opening and other exceptional expenses totalling £474,000 (£283,000), while the Canadian figure is struck after pre-opening expenses of £225,000 (exceptional expenses £454,000). On a CCA basis the profit

before tax comes down to £211m (£172m) and the earnings per share to 8.45p (£6.96p). The annual accounts will be posted on June 4, and the annual meeting held on July 1 at the Royal Lancaster Hotel, W, at 11 am.

Group sales	1981-82	1980-81
United Kingdom	1,252.3	1,232.2
Europe	1,054.0	978.5
Homebased, etc.	178.3	142.9
Canada	21.8	33.3
Clothing	68.0	53.4
Homebased, etc.	3.6	2.3
Food	5.6	6.0
Canada	102.3	78.1
Clothing	88.0	58.4
Homebased, etc.	25.0	17.6
Food	10.3	7.1
Direct exports	28.5	22.3
Trading profit	252.4	198.2
Interest payable	15.8	15.8
Depreciation	22.7	19.1
Profit sharing	21.6	12.2
Interest receivable	0.8	3.2
Asset sale	22.1	18.2
Profit before tax	216.4	178.9
United Kingdom	3.1	1.9
Canada	2.6	2.5
Taxation	102.3	102.3
Minority	1.1	1.1
Attributable	120.7	99.5
Shareholders	120.7	99.5
Ordinary	60.2	49.6
Undistributed	60.4	49.9

£5.28m turnround into black by BSG

THE MOVE back into the black mid-year by BSG International was short-lived as this industrial holding concern still showed a healthy concern in fortunes for 1981 achieving pre-tax profits of £320,000, compared with a deficit of £4.96m previously.

The group returned to profit in the first quarter and by mid-way recorded taxable profits of £514,000, against a loss of £440,000 for the corresponding period. The second half shortfall is blamed on strikes and further interest rate increases.

Although the group has again traded profitably in the first quarter of the current year, the directors say it would be inappropriate to recommend a dividend for 1981 other than the nominal 0.1p net paid at the interim stage—last year both payments were omitted.

They say they are expecting improved profits for 1982 provided the UK economy does not deteriorate and that interest rates remain stable.

Turnover for the year under review totalled £247.6m (£237m) and trading profits came through at £4.98m (£2.3m)—comprising vehicle distribution £2.81m (£2.45m) and manufacturing £2.17m (£154,000 loss).

The pre-tax figure included a share of associate losses of £45,000 (nil) and was after interest charges of £3.61m (£7.28m). Tax took £496,000 (£13,000).

Minority debits were £173,000 (£39,000 credit) and extraordinary debits totalled £1.16m (£3.46m).

Loss per 10p share is given as being down from 7.48p to 0.53p. CCA pre-tax losses were £289,900 (£7.34m).

George Wimpey slips to £44.2m: lifts dividend

REFLECTING THE difficulties of the continuing recession both at home and overseas, pre-tax profits of George Wimpey, the building, civil, mechanical and electrical engineering contractor, dropped from £54.2m to £44.2m in 1981.

Sales of private houses in the UK fell from 6,100 to 7,300 though in recent months demand has increased particularly for first-time home buyers, says Sir Reginald Smith, chairman.

The group's response of offering very economic houses backed with vigorous marketing has resulted in an encouraging increase in house-starts in the first quarter of 1982, he adds.

Stated earnings per 25p share for the year fell from 16.9p to

15.5p excluding corporation tax credits for previous years.

The final dividend is increased, however, from 1.7p to 1.50p absorbing £4.93m (£4.35m) which lifts the net total for the year from 2.55p to 2.5p a share. The annual cost goes up from £5.83m to £7.17m.

Total turnover for the year slipped from £1,529m to £1,180m and operating profit from £89.4m to £59.8m.

Interest costs also rose from £14.2m to £15.6m but the release of deferred tax provisions produced a tax credit of £6m against a charge of £11.7m last year, increasing net profit from £43.2m to £50.2m.

Interest charges were especially onerous in North America, Sir Reginald says. Despite this,

however, he is confident that the long-established business in the U.S. provides the group with a firm foundation for growth.

With a further reduction in borrowings in the year the group is "well placed to continue investment," he adds.

At half-way stage pre-tax profits were down from £59.4m to £4.4m.

On a current cost basis the year's pre-tax profits were £27.3m (£26.3m), while stated earnings per share were 10.2p (£8.1p) after tax.

Copies of the report and accounts will be distributed to shareholders on May 15 and the annual meeting will be held on June 21.

See Lex

Flight Refuelling edges ahead

PRE-TAX profits at Flight Refuelling (Holdings) edged ahead from £2.91m to £3.02m in 1981, and the directors are recommending a one-for-two bonus.

The final dividend is slated from 1.6p net to 2.35p for an increased total of 3.75p compared with 2.55p.

Turnover of this manufacturer of specialised equipment for aircraft, nuclear and electronics industries, improved from £9,000m to £21.89m. Group results include only six months' contribution from Stanley Aviation which was acquired on June 30, 1981 at a cost of \$10.6m.

The directors say the results show a modest improvement on those for the previous year. The depressed state of the national economy, together with the limitations and changes in defence expenditure, have inevitably affected some areas of the group's business in the short-term. However, despite these difficulties, they consider that the performance in the well-established areas of its business has been very satisfactory.

Accordingly, they are recommending a one-for-two bonus issue to be allotted to ordinary shareholders.

The pre-tax figure was struck

after an exceptional debit of £61,000 (nil), being the net interest paid relating to the acquisition of Stanley Aviation Corp. associates' losses of £3,000 (nil) and the allocation of £73,000 (nil) to the share incentive scheme.

There was a substantial increase in tax, which was up from £127,000 to £748,000. Attributable profits were £2.7m (£2.79m), and dividends absorbed £581,000 against £321,000.

Stated earnings per 25p share were down to 16.31p (21.32p). Earnings per share have been adjusted to reflect the rights issue made last June.

Office and Electronic at £2.66m

TAXABLE profits of Office and Electronic Machines, the UK sole distributor of Adler, Imperial and Triumph typewriters, calculators and word processors, rose marginally from £2.52m to £2.66m in 1981. Turnover absorbed a slight advance to £22.65m compared with £22.4m.

The year's dividend is being increased from 7p to 7.5p per 25p share, with a final of 5p (4.5p). Earnings per share are, however, stated lower at 25.05p (27.54p) including release of deferred tax of 28.07p.

Tax took £1.12m (£890,512 credit after release of £1.72m deferred tax) leaving attributable profits of £1.58m (£3.42m). Current cost adjustments reduced the attributable surplus to £1.1m (£1.53m) excluding the release of deferred tax.

After dividends of £459,366 (£428,742) the retained profits emerged at £1,07m (£3m).

At the half-year stage, the company had made pre-tax profits of £1.3m (£1.7m) on turnover of £11.43m (£12.28m).

comment

With the slip back into a pre-tax loss of £194,000 in the second half, BSG failed to meet expectations. The good news was the sharp cut in interest costs. Some 60 per cent of this came from a £7m reduction in interest, mainly through property sales. This has taken some of the heat out of gearing which is down from 60 per cent to around 30 per cent. While the vehicle side is likely to continue to wallow in recession until late 1983, the manufacturing division—despite losses in Germany, France and Spain—made a timely recovery. The indications from first quarter performance are that the group will produce an improved half-time result. For a reason, units late 1983, the manufacturing division is anticipated including recovery overseas—where potential is seen to be good—and there should be £1.5m more property sales. Altogether this puts a return in pre-tax dividend of 4.4m. Yesterday the shares remained unchanged at 15p.

Norwich Union suffers increase in surrenders

A SUBSTANTIAL jump in the number of life policies being surrendered or lapsed is reported by the Norwich Union Insurance Group in its 1981 report and accounts.

Mr Michael Falcon, in his chairman's statement, said that during the year 5.1 per cent of the life policies in force were either surrendered or lapsed, compared with an average of 3.3 per cent for the preceding 10 years.

This increase he attributed to the current economic climate. He also points out that even though the figures are below the average for the industry, nevertheless such a high figure was imposing a severe strain on the administration.

The Norwich Union, unlike most other life companies, has not rushed to invest its UK life new money in overseas equity

markets. Last year a total of £305m new money was available for investment and £266m was invested in the UK. Overseas holding now constitutes about 2.5 per cent of UK life funds.

The life funds invested £88m in fixed interest gilts and a further £31m in index-linked gilts. Mr Falcon emphasises that the real yields offered at present on index-linked gilts do not rise nearly 12 per cent to £24m, single premiums by nearly 20 per cent to £75m and investment income by over 20 per cent to £275m.

The fire insurance subsidiary reported a pre-tax profit of nearly £7m to £3.2m, despite

Evered cuts deficit to £0.3m

A SHARP reduction in pre-tax losses has been shown by Evered and Company Holdings, engineer, from £44,451 to £11,811 for 1981. Turnover was lower at £9m, compared with £11.51m.

There is again no dividend—the last payment was a final of 0.25p in 1979. Losses per 25p share were cut from 11.2p to 5p. The prospects for the current year were more encouraging.

The directors, although January was a difficult month, management accounts for the first quarter of 1982 indicate that the improving trend has been maintained.

As stated in the interim report, the recovery of the group has continued in the second half despite the economic uncertainties arising from the sharp increase in interest rates midway through the period.

A small trading profit of £7,000 was made in the six months, an improvement in which all the operating subsidiaries contributed, say the directors.

Pre-tax profits were struck after reduced interest charges of £174,151 (£267,731). There was a charge for tax last time of £2,082. Net losses came to £230,647 (£549,926) before extraordinary debits of £248,658 (£273,736).

On a current cost basis, pre-tax losses amounted to £44,451 (£52,600).

United Wire up midway

TAXABLE PROFIT of United Wire Group in the half year to March 27 1982, was well ahead at £649,000 on the £30,000 in the same period a year earlier, after interest charges of £252,000, up from £184,000. Turnover rose from £5.48m to £9.27m.

The net interim dividend is being held at 2.2p—last year a total of 5.75p was paid out of taxable profits of £502,000. Half year stated earnings per 25p share were 2.9p, against 0.1p.

Tax was higher at £380,000 (£21,000), for a net profit of £269,000, compared with £9,000. There was an extraordinary debit of £50,000 (nil).

Mr A. A. Green, chairman, says profitability improved significantly in the traditional sector of the group, including non-

ferrous wire, wirecloth and synthetic fabrics. The benefits of reorganising these activities over the past two years were beginning to be seen.

The extraordinary loss was attributable to the lower value of the Rand, affecting group activities in South Africa.

While United operations continued to expand rapidly, the chairman adds, with first-half profits almost equal to those made in the previous full year, SeaMark Systems sales were growing but it was not yet profitable.

As stated in the interim report, the recovery of the group has continued in the second half despite the economic uncertainties arising from the sharp increase in interest rates midway through the period.

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On a current cost basis, pre-tax losses amounted to £44,451 (£52,600).



First three months' results

The Board of Directors of Imperial Chemical Industries PLC announce the following unaudited trading results of the Group for the first quarter of 1982, with comparative figures for 1981.

1981	1982
First Quarter	First Quarter
£ millions	£ millions
438	485
849	1,098
1,287	1,583
209	198
1,496	1,781
52	62
74	96
-36	-26
16	36
-6	-6
10	30
-	-
10	30
1.7p	5.1p

Group chemical sales in the first quarter were £1,583m, an increase of £15m (1%) over the fourth quarter 1981. Oil sales fell by £65m (25%) to £198m. There was a volume improvement in chemical sales of 1%, an increase of 2% in overseas markets being offset by a reduction in the UK.

The f.o.b. value of chemical exports from the UK was £368m, an increase of 5% on the previous quarter (£352m). Oil exports fell from £40m to £13m.

The Company's oil business produced trading profits of £12m in the quarter (fourth quarter 1981 £25m) after supplementary petroleum duty and petroleum revenue tax of £41m (fourth quarter 1981 £45m).

The year started badly with UK trading adversely affected by weather and transport difficulties but there was improvement towards the end of the quarter. However, there is no evidence as yet of a sustained upturn. The fall in the price of oil contributed to lower oil profits but failed to benefit margins in oil related businesses where because of industry overcapacity pressure on prices intensified. In most overseas territories profits held up well despite recession in many parts of the world.

The following table summarises the sales to external customers and profits before tax by quarter:

	Chemical Sales	Oil Sales	Profit Before Tax
1981	£m	£m	£m
1st Quarter	1,287	209	52
2nd Quarter	1,418	185	83
3rd Quarter	1,477	174	86
4th Quarter	1,568	263	114
Year	5,750	831	335
1982 1st Quarter	1,583	198	62

The charge for taxation for the first quarter of 1982 amounting to £26m (1981 £36m) consists of £7m of UK corporation tax (1981 £20m) and £19m taxation of overseas subsidiaries and principal associated companies (1981 £16m).

Trading Results for the first half year 1982 will be announced on Thursday 29 July 1982.

P. S. G. FLINT Secretary

Imperial Chemical House Millbank London SW1P 3JF 29 April 1982

Yule Catto soars to £5.7m and pays more

FOR THE year ended December 31 1981, Yule Catto and Co. returned taxable profits of £5.75m, which were 140 per cent above the £2.39m achieved for the previous 14 months.

The directors say that the acquisition of Revortex Chemicals in 1980 and subsequent change in the group's financial year make comparisons extremely difficult but earnings per share have increased from 7.9p in 1979 to 2.6p in 1980 to 11.8p for 1981.

They are stepping up the final dividend from 1.2p to 1.5p for

a net total of 2.5p, an improvement of 25 per cent on last time's 2p.

No share of profit from Goal Petroleum was included in the full year results following its reclassification as an investment instead of an associate. In addition, Doverstrand has become an associate instead of a subsidiary following its amalgamation with the Revortex compounding division.

It is pointed out that the group's UK performance was "very creditable" and that it continued to benefit from a

major contribution to profits from overseas companies.

Turnover for the year rose to £101.73m (£36.28m for 14 months) and trading profits were £5.98m (£2.9m).

Tax took £2,577m (£1.34m) and after minority debits of £588,000 (£553,000) and extraordinary debits this time of £83,000 (£406,000 credit) attributable profits emerged 177 per cent ahead at £2.5m (£94,000). CCA pre-tax profits were £4.4m.

The group's main activities include rubber and palm oil cultivation in Malaysia and the fabrication of thermoplastic materials.

The company says the current year is likely to be one of consolidation, rather than further expansion. The GOAL investment is now worth about £1.4m less than it was a year ago, but the company insists that the stake holds a lot of potential. Yule Catto's shares gained 5p yesterday moving to 87p. This gives an historic fully-taxed p/e of around 7, which discounts the company's modest growth profile for the group overall. The increased dividend indicates a yield of more than 4 per cent.

comment

Nearly all of Yule Catto's increase is thanks to the Revortex acquisition. Platations have weakened in the year, due to lower prices for rubber and palm products. Manufacturing has been fairly static, with only rubber skylight making a chipper. YC is putting money into its new chemical acquisition, notably overseas where more than half the division's profits come from.

DIVIDENDS ANNOUNCED

Company	Current payment	Date of payment	Corresponding div. year	Total last year	Total year
Aberdeen Trust	2.3	June 25	2.1	—	6.1
Areson Group	Nil	—	0.52	—	1.23
Ben Bailey	0.25	—	0.44	—	1.0
Henry Boot and Sons	10	—	10	13	13
Border Breweries	3.8	July 5	3.6	5.2	4.9
British Assets 2nd Qtd	1.1	July 5	1.0	—	4.05
BSG International	Nil	—	Nil	0.1	Nil
De Vere Hotels	3	July 1	3	6	6
Downhorne	Nil	—	Nil	0.9	—
Flight Refuelling	2.35†	July 9	1.5	2.75†	2.55
Highcroft	1.7	July 1	1.5	2.85	2.5
Hoylewood Rubber	30p	June 11	30	45	45
Hongkong Rubber	17	June 11	13*	25	19*
Hopkinson Holdings	4.15‡	Aug 6	3.56*	5.44‡	4.84*
Kuala Selangor Rubber	9	June 11	9	13.5	13.5
Marks and Spencer	2.85	July 16	2.3	4.6	3.8
S. Simpson	5	July 2	4.5	7.5	7
Office and Electronic	1.51	July 2	1	—	3
S. Simpson	2.1	July 1	2.1	2.1	2.1
Towles	2.2	July 1	2.2	—	5.75
United Wire	1.95	July 2	1.7	2.8	2.55
George Wimpey	1.5	July 5	1.2	2.5	2
Yule Catto	1.5	July 5	1.2	2.5	2

Dividends shown pence per share net except where otherwise stated. † Equivalent after allowing for scrip issue. ‡ On capital increased by rights and/or acquisition issues. * USM Stock. † On capital to be increased by scrip issue.

ESTATES AND GENERAL INVESTMENTS P.L.C.

Property Investment and Development

FIVE YEAR RECORD

	1977	1978	1979	1980	1981
Investment rental income	5000	5000	5000	5000	5000
Profit before taxation	151	492	1,103	1,423	1,538
Ordinary stockholders' funds	3,080	9,178	9,607	15,001	19,876
Investment portfolio	1,084	12,597	12,961	18,356	24,367
Net assets per ordinary stock unit	31.7p	52.1p	54.6p	82.6p	109.4p
Dividends per ordinary stock unit	1.00p	1.20p	1.40p	1.55p	1.75p

Completion of new developments will enhance steady growth in rental income and assets per stock unit.

Majority of borrowings are long-term with repayment dates from 1985 to 2002.

Despite additions to portfolio, borrowings still remain at approximately 50% of stockholders' funds.

Copies of the annual report available from the Secretary, 51 Green Street, Mayfair, London W1Y 3RH.

M. J. H. Nightingale & Co. Limited

27/28 Lovat Lane London EC3R 8EB Telephone 01-462 1212

1981-82	High Low	Company	P-20	Change	Divs	Yield	Notes
100	100	Ass. Sec. Ind. CULS	20	—	—	—	—
25	82	Aisling	40	—	—	—	—
51	33	Amalgam & Alloys	77	—	—	—	—
107	100	CCl 11pc Conv. Pref	27	—	—	—	—
104	81	Deborah Services	63	—	—	—	—
83	39	Frank Horrell	129	—	—	—	—
78	46	George Barr	58	—	—	—	—
102	82	Ind. Precision Castings	97	—	—	—	—
108	100	Isis Conv. Pref	102	—	—	—	—
113	94	Jackson Group	59	—	—	—	—
130	108	James Burroughs	113	—	—	—	—
234	240	Robert Jenkins	242	—	—	—	—
65	51	Serutony	51	—</			

Companies and Markets

UK COMPANY NEWS

Lilleshall dividend cut by 1p

HAVING INCURRED a pre-tax loss of £84,000 midway, the steel and engineering holding company Lilleshall reports losses for the year to December 28 1981 of £100,000 compared with a pre-tax profit of £208,000. Turnover fell from £11.64m to £10.01m.

Mr J. G. Price, chairman and chief executive, says the reduced losses in the second half were partly because of a 10 per cent sales increase but were largely due to continuing losses at the steel mill. However, this was offset by a severe reduction in results at the engineering division.

The final dividend per ordinary share has consequently been cut from 2.5p to 1.5p net, making a total of 2.5p for the year compared with 3.5p. Earnings per 10p share are stated to be nil against 23.7p before excluding deferred taxation adjustments.

The company had a tax rebate of £27,000 against a payment of £268,000 last time, and extraordinary items (net of tax) took £38,000 (nil), leaving attributable losses of £165,000 against profits of £572,000.

The chairman says: "The company has traded profitably for the first three months of the current year but there is renewed hesitancy in the steel industry, particularly as it affects the steel mill, and it is not possible to forecast results for 1982."

Current cost accounting methods produce a pre-tax loss of £269,000 (profit £114,000).

Oil profits fall but ICI ahead in opening quarter

TRADING PROFITS from Imperial Chemical Industries' oil business fell from £24m to £12m in the first quarter of 1982. This figure was after supplementary petroleum duty and petroleum revenue tax up from £31m to £41m.

Pre-tax profits of Britain's largest manufacturer increased by £10m to £82m, despite depreciation climbing by £22m to £96m. Sales showed a substantial improvement from £1.5bn to £1.73bn.

Group chemical sales contributed £1.58bn, of this total a modest increase of 1 per cent over the previous quarter's figures. There was a volume improvement in chemical sales,

again by 1 per cent—an increase of 2 per cent in overseas markets being offset by a reduction in the UK.

Chemical sales in the fourth quarter last year were £1.57bn and oil sales totalled £263m in the same period. The final quarter pre-tax figure was £14m.

Year-end figures were: group sales £5.88bn, including £5.75bn from chemicals, and £831m from oil; pre-tax profits £235m.

The FOB value of chemical exports from the UK was £385m, an increase of 5 per cent on the previous quarter's £362m. Oil sales fell by 26 per cent to £198m.

The directors say the year started badly with UK trading

adversely affected by the weather and transport difficulties, but there was improvement towards the end of the quarter. However, they say there is no evidence, as yet, of a sustained upturn.

The fall in the price of oil contributed to lower oil profits, but failed to benefit margins in oil-related businesses.

First quarter tax was down from £36m to £26m, leaving £36m against £16m. After minorities of £8m (same), attributable profits were £30m compared with £10m, and the stated earnings per share advanced from 1.7p to 5.1p.

See Lex

Losses cut at Audio Fidelity

A REDUCTION from £215,000 to £192,000 in its pre-tax losses is reported by Audio Fidelity for the half year to October 31 1981. In the previous full year to April 30 1981 there were losses of £290,617 against profits of £99,048.

The directors of this manufacturer, wholesaler and retailer of hi-fidelity sound equipment, say retail losses over the normally quiet summer period were even higher than expected. Adverse conditions have continued into the second half. Little improvement was achieved during the Christmas period due to appalling weather conditions.

While showing an improvement as a whole, manufacturing divisions suffered heavy re-organisational costs, which they say will not affect the second half figures.

This division is enjoying markedly increased demand for its products. The German subsidiary, Orchestralelektronik Vertebels, ceased trading in December.

There was again no tax charge for the half year but there were minority credits of £2,000 (£3,000).

Border Breweries improvement

TAXABLE profit of Border Breweries (Wrexham) moved ahead from £903,701 to £938,635 in the year to February 28 1982, on turnover up from £14.68m to £15.29m. Profits at half time were £508,000.

A higher final dividend of 3.8p net, compared with 3.6p, lifts the total to 5.2p (4.9p). Stated earnings per 25p share were 11.59p, against 10.55p.

Tax at £309,474 was down from £330,888. Extraordinary credits of £47,356 (£40,553) were the profit from disposing of freehold property.

Pre-tax profit on a CCA basis was £613,000, down from £661,000.

Strong recovery shown by Hoskins & Horton

A YEAR of "consolidation and recovery" had been achieved at Hoskins & Horton after a serious erosion of the company's asset base in 1980, according to Mr R. C. Hale, chairman. It finished 1981 with pre-tax profits of £451,000, against a £188,000 loss and a mid-year profit of £234,000.

Turnover of this building supplier, builder and contractor rose from £8.95m to £9.8m. Interest payments took less at £134,000 (£271,000).

A final payment of 3p per share (2p) will raise the total dividend to 5.2p. Stated earnings per 20p share were 18.4p, against a 26.5p loss.

Tax took less at £15,000 (£511,000) and extraordinary debits at £19,000 were also lower, against £627,000.

In view of the 1980 difficulties and the continuing recession, the 1981 performance had been sound, Mr Hale said. The Horton companies began 1982 poorly because of the bad weather and prospects depended on the state of the domestic economy.

Hosking had made a sounder start, but its summer performance would probably depend on winning export contracts.

A pre-tax profit of £260,000 was recorded on a CCA basis, against a £541,000 loss.

Production changes and U.S. loss hit Arenson

FOR THE six months ended January 31 1982 Arenson Group has run into a loss and is omitting the interim dividend. The loss was £630,000, compared with a profit of £28,000 in the comparable period last year when an interim of 0.52p was paid.

Mr Archy Arenson, the chairman, says the required changes in production techniques in both the office and domestic furniture divisions to make the new ranges caused heavily increased production costs, which continued through to the end of March. And this situation was aggravated by losses of some £200,000 sustained in the U.S.

While trading conditions have not improved, Mr Arenson says the group is now generating profitably in the home market. "We are in a far stronger position to regain our market share because of the actions that we have taken over the past 18 months."

With regard to the U.S. subsidiary, he says the trading and management problems being experienced will result in further losses in the second half. "However, we are paying special and urgent attention to this matter so that by the end of the current year satisfactory solutions will have been implemented."

Turnover for the half year came to £8.8m (£8.18m). The loss per share is shown at 6.8p (0.4p). In the full year to July 31 1981 the group made a profit of £68,090 and paid a total dividend of 1.25p.

De Vere Hotels over £0.8m off at year-end

SECOND HALF profits of De Vere Hotels and Restaurants have fallen from £781,000 to £289,000. Following the setback at the recent half, the strength of the balance sheet with a net asset backing of 336p per share provides a defence against a prolongation of the recession and ensures the group will be able to take full advantage of the recovery when it comes.

Liquidity has been boosted by the recent hotel sale, and will be further augmented through the disposal of low yielding property investments under negoti-

ation.

The profit was struck after depreciation, repairs and revaluations of £1.94m (£1.92m). There is an extraordinary credit of £1.48m (£17,000) including realisation of prior year revaluation surpluses £1.95m. Earnings per share are down from 9p to 4.1p.

Henry Boot at £1.88m: pays same

PRE-TAX profit for Henry Boot and Sons improved in 1981 to £1.88m, from £1.7m, on turnover slightly up to £24.47m from £23.54m.

Profits were £239,000 after six months, when the chairman predicted a difficult year for profit growth.

The final dividend of 10p net is being repeated, for a same-against-total of 15p. Earnings per 50p share are given as 27.5p (27.6p).

Tax credits of £86,000 (£1.7m) made a net profit of £1.97m, against £3.41m.

Minorities credits came to £12,000 (nil). On a CCA basis, taxable profits £1.56m, compared with £1.7m.

The company's main interests are in construction, joinery, engineering, property, foundry, plant and finance.

British Assets up to £1.76m

In the six months ended March 31 1982 net income available for ordinary shareholders in British Assets Trust rose from £1.62m to £1.76m. Gross income declined by £400,000 to £3.46m as a result of the sale of UK government securities to repay two U.S. dollar loans but this was more than offset by a cut in interest and expenses by £800,000 to £334,000.

A second quarterly dividend of 1.1p is declared, making 2.3p to date. For the year ended September 30 1981 the company paid a total of 4.65p. Tax took £1.27m (£1.28m) and earnings are shown at 1.99p (2.7p) per share.

At March 31, net asset value was 117.5p, compared with 119.5p at September 30 1981.

ASSOC HEAD

Underwriting is in progress for the offer for 25p by tender of Associated Heads. Some 40 per cent of the ordinary share capital, or £200,000, ordinary shares, will be offered by way of tender. The prospectus will be applied for on Monday and the application list will open on May 7.

S. G. Warburg, the merchant bank, is advising the company, with stockbrokers, Messrs Rowe and Pitman.

GRA GROUP

The GRA Group, the greyhound racing business, granted a full relisting on the stock market earlier this week, will begin trading this morning. Brokers to GRA are Rowe and Pitman.

THE TRING HALL
USM INDEX
122.1 (+1.0)
Close of business 29/4/82
BASE DATE 10/11/80 100
Tel: 01-628 1581

LADBROKE INDEX
Close 577-882 (+4)

Hoechst

NOTICE IS HEREBY GIVEN THAT
The Annual General Meeting will be held at 10 a.m., on Tuesday, 8th June 1982, at the Jahrhunderthalle in Frankfurt am Main-Höchst, Pfaffenwiesse.

Agenda

1. Presentation of the Annual Report and Accounts of Hoechst Aktiengesellschaft for 1981, with the Report of the Supervisory Board, and the Consolidated Report and Accounts for 1981.
2. Allocation of the profit available for dividend. It is proposed to pay a dividend of DM 7.— per share of DM 50.— nominal for the financial year 1981.
3. Ratification of the actions of the Board of Management for 1981.
4. Ratification of the actions of the Supervisory Board for 1981.
5. Resolution that the Board of Management be authorised until 7th June 1987, with the approval of the Supervisory Board, to increase the share capital by up to DM 300 million by the issue of new shares against contributions in cash or in kind, and to decide on the exclusion of the subscription right of shareholders.
6. Election of auditors for the financial year 1982.

The full agenda, including the proposed resolutions, is contained in the Bundesanzeiger no. 81 of 30th April, 1982.

Shareholders wishing to be present and to vote at the Meeting must comply with Article 14 of the Articles of Association and deposit their share certificates during usual business hours by Thursday, 3rd June 1982, at the latest until after the Meeting, at one of the depositories listed in the Bundesanzeiger no. 81 of 30th April 1982, or, in the United Kingdom, at the offices of

S. G. Warburg & Co. Ltd.
30, Gresham Street
London EC2P 2EB

Frankfurt am Main, April 1982

Hoechst Aktiengesellschaft

SPAIN

April 29	Price	%	4p
Banco Bilbao	388	-3	
Banco Central	339	-3	
Banco Exterior	310	+5	
Banco Hispano	310	-2	
Banco Ind. Car.	310		
Banco Santander	322	-3	
Banco Urquijo	200		
Banco Viesgo	320	-3	
Banco Zaragoza	248		
Oragedos	150	-2	
Espanole Zinc	68		
Festa	68		
Gal. Pinedos	40		
Mitrola	65		
Industria	66.5		
Patrolina	91.0		
Petroliber	39		
Sofelias	6.50		
Togelonia	71.7	+1.2	
Union Elec.	64	+0.5	

Norwich Union

The Chairman Mr M G Falcon CBE, DL reports:

Overall, our results for 1981 showed an improvement over those for the previous year. Whilst increases in premium income were modest, Group profits were enhanced by greater investment earnings. The Life Society surpluses reached record levels, which were reflected in higher bonuses to policyholders. The Fire Society, operating in an intensely competitive market, produced pre-tax profits 21% greater than in 1980.

Life Society

Overall in the United Kingdom our new annual premiums increased by 6%, but the bright spot was pensions for those not in company schemes, where new annual premiums rose by some 12% and single premiums by 68%. Overseas, we had another very successful year, achieving a rise of 38% in new annual premiums, mainly from pension policies.

During 1981 a total of £305m of new money was invested, £260m of it in the United Kingdom. £100m was put into UK Government Stocks at very satisfactory yields, and we added to our property portfolio, which now exceeds £1,130m in market value, £1,000m of which is in the UK. Bonuses to policyholders were further increased.

Fire Society

Despite intense competition and the consequent lower premium growth, the Fire Society's pre-tax profit rose to £39 million, £7 million up on 1980 but only £3 million better than 1979. A deterioration in the overall underwriting result was more than offset by increased investment income.

Competitive forces which slowed the growth of our business in the second half of 1980 gathered further momentum throughout 1981. Although in the United Kingdom we achieved a modest underwriting profit, the measures we have had to take in the attempt to preserve our share of the market do not augur well for the 1982 result.

Summary of Group Results for 1981

	1981	1980		1981	1980
LIFE SOCIETY			FIRE SOCIETY		
TOTAL PREMIUMS:			PREMIUMS WRITTEN	£250.2m	£232.8m
Annual	£324.0m	£290.1m	Underwriting Loss	(4.8)	(3.2)
Single	74.8	62.7	Investment Income	44.7	37.6
	398.8	352.8	Share of Associated Companies profits	2.9	1.3
New Annual Premiums	75.5	66.4	Expenses not charged to other accounts	(3.6)	(3.9)
COST OF BONUSES:			PROFIT BEFORE TAXATION	39.2	32.3
Annual/Reversionary	85.7	71.9	Taxation	(17.6)	(14.1)
Additional	13.3	9.2	NET PROFIT	21.6	18.2
			Dividends	10.0	9.6
GROUP ASSETS	£4,347.3m	£3,676.2m			

Banking

Norwich General Trust, which specialises in long-term loans to industry and commerce, found new business difficult to obtain in 1981 and loans completed amounted to £15.5 million.

A bank committee to make good progress in 1981, with business expanding in all departments and its balance sheet total rising to £250 million.

NW Group

The Norwich Winterthur Group produced a pre-tax profit of £6.2 million compared with £4.0 million in 1980, and wrote a total premium volume in respect of their reinsurance and direct business overseas of £17.2 million, an increase of 28.4%.

Extracts from the Statement of the Chairman, Norwich Union Insurance Group

Copies of the Directors' Report and Group Accounts including the Chairman's full Statement may be obtained from the Norwich Union Insurance Group, 100, Abchurch Lane, London EC4N 3DF.

The Annual General Meeting of the Norwich Union Insurance Society will be held on 14th May 1982 in Norwich.



WEIR

Results for year ended 1st January, 1982.

	1981	1980
	£'000	£'000
RECOVERY		
Turnover	152,220	165,627
Profit (loss) before interest and tax:		
The Group	10,092	(1,524)
Associated companies	2,979	618
Interest	(4,773)	(7,346)
Profit (loss) before tax	8,298	(8,252)
Shareholders funds	42,381	23,311
Total borrowings	20,702	45,767
Earnings (loss) per share: Fully diluted		
Historic cost	10.7p	(40.7p)
Current cost	6.7p	(47.8p)
Proposed total dividends:		
on Convertible Preference Shares	1.5618p	—
on Ordinary Shares	1.85p	—

The benefits of the measures taken to close loss-making plants and to reduce costs began to show early in 1981. During the year better cost control and pricing policies had a beneficial effect and marketing efforts were intensified.

Weir Pumps returned to profitability and achieved significant reductions in working capital and borrowings. Orders received increased to £93 million, with a substantial increase in export orders.

The demand for steel castings improved slightly. This, with increased exports from Cator, Jopling and Holbrook, produced a marginally better return for the Foundries Division.

Weir Westgarth had a good year but was no large new desalination contracts. The company is extending its operations into other contract engineering businesses and has obtained its first major order.

Group policy is aimed at further reductions in borrowings.

PROSPECTS

The recovery of the Group has been rapid. It is now consolidating the gains made and is in good shape to benefit from any improvement in domestic or world trade. Even if there is no such improvement in 1982, the Group results for the year should be broadly similar to those of 1981.

Weir Group—pumps, power plant auxiliaries, steel castings, metal pattern equipment, water desalination plant, contract engineering. Group companies employ 5,500. Subsidiaries and associate companies in Canada, Australia, France, Italy, Spain, Netherlands, Middle East, Far East and Nigeria.

Copies of the Report and Accounts may be obtained from the Secretary, The Weir Group PLC, Cullinstown, Glasgow, G4 4JY.

WEIR
THE WEIR GROUP PLC

UK COMPANY NEWS

Companies and Markets

Hoover losses reduced to £1.9m in first quarter

ENCOURAGING improvements in Europe are reported by the directors of Hoover and group losses in the first three months to March 31 1982 show a reduction from last time's £3.4m to £1.9m.

successful introduction of new products is completed by mid-year (as planned) and the company concludes a plant agreement with the Cambuslang employees.

comment Hoover's "dynamic new beginning" is getting off to a slow start. Sales slipped badly in the first quarter, mainly due to the first weather in January, however, rather than any dramatic underlying downturn in business.

Good second half boosts Hopkinsons

THE SHARP recovery seen by Hopkinsons Holdings at mid-year continued through the second six months and for the year to January 29 1982 the group returned taxable profits of £3.6m, compared with £2.5m.

BOARD MEETINGS

Table listing board meetings for various companies including Associated Paper Industries, Baxendale, and others.



Extracts from the Statement by the Chairman, J.E.H. Collins, MBE, DSC

Results and Dividends The results reflect the extreme competition experienced by the insurance industry in most of the territories in which the Group operates.

The Directors are able to recommend the payment of a final dividend which, with the interim dividend paid in January 1982, will constitute an increase of 12.9% compared with the dividends paid in respect of the year 1980.

United Kingdom The severity of market competition made premium growth difficult to achieve. We expect competition to become more intense and any margins in the account are likely to be under increased pressure during 1982.

Other Territories Germany has again produced an underwriting loss, but I feel that the considerable efforts that have been made are beginning to show signs of improvement.

The Canadian market has suffered a complete breakdown in rating disciplines at a time when claims frequency has increased to an unprecedented level, but a satisfactory result has again been achieved in the United States.

Life Sales of life assurance policies were more buoyant during the year than expected. New annual premiums increased by 13% and new single premiums were 6% up.

Prospects There are expectations for improved results in 1982 especially in Australia, Canada, Germany and South Africa despite local market conditions.

Weir sees broadly similar year

THE RECOVERY of Weir Group, the engineering foundries and water plant concern, has been rapid, Sir Francis Tombs, the chairman, confirms in his annual statement.

He points out that the gains made are now being consolidated and the group is in good shape to benefit from any improvement in domestic or world trade.

However, the chairman warns that conditions in UK engineering remain difficult and that the recession at home is showing no signs of abating, at least in relation to capital goods.

With the group now operating on a stable basis Sir Francis regards the final dividend of 1.75p as "a prudent earnest of confidence in the future."

As a result of the two mill closures the directors feel it should be possible to contain the situation more effectively in the coming year.

Shiloh reduces deficit DESPITE disastrous trading conditions, made worse by a further deterioration in margins caused by even more severe competition from imports, Shiloh Spicers has reduced its operating loss in the year ended March 27, 1982 from £395,542 to £160,248.

deferred until 1982 the repayment of £1.6m due in 1981.

As part of the reconstruction a far-reaching credit agreement and a trust deed were completed with the banks which imposed, and continues to impose, extensive constraints on the group's freedom of commercial action.

Remedies begin to show through at Downiebrae ACTION taken in the first half at Downiebrae, a maker of steel profiles and pipe flanges, was vindicated with second half losses being contained at £27,000.

comment The previous year's cost cutting and tighter financial management helped pull Hopkinsons out of its profit trough in 1981-82. Pre-interest profit margins were nudged up 2 points to 6.5 per cent though still well below the level of the golden years of 1977 and 1978.

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S. Simpson back in the black

REFLECTING THE benefits of reorganisation, S. Simpson, tailor and clothes maker, has swung back into profit with pre-tax figures of £235,000 for the half-year to January 31 1982.

comment The previous year's cost cutting and tighter financial management helped pull Hopkinsons out of its profit trough in 1981-82. Pre-interest profit margins were nudged up 2 points to 6.5 per cent though still well below the level of the golden years of 1977 and 1978.

S. Lyles plc Carpet Yarn Spinners and Dyers

Table showing financial results for S. Lyles plc, including turnover, profit before tax, and earnings per share.

Shortly after reporting in my last statement an improvement in trading conditions, the imposition of higher interest rates started to have an adverse effect on our home market.

Advertisement for Watmoughs (Holdings) PLC, including group turnover, profit before tax, and dividend per share.

BANK RETURN

Table showing banking and issue department returns, including liabilities, assets, and notes issued.

BASE LENDING RATES

Table listing base lending rates for various banks and financial institutions.



Copies of the full ANNUAL Report for 1981 are obtainable from The Secretary, Guardian Royal Exchange Assurance plc, Royal Exchange, London EC3V 3LS.

Guardian Royal Exchange Assurance An insurance service worldwide

Large advertisement for Scottish Provident, featuring a hand holding a document and text about meeting the needs of the times.

Handwritten text at the bottom of the page: هكزان لاول

Companies and Markets

UK COMPANY NEWS

BIDS AND DEALS

Builder's scheme sanctioned

THE SCHEME of Arrangement set up by the joint receivers of Northern Developments (Buildings), the second biggest house-building company in the UK when it collapsed in 1975, has been sanctioned by the High Courts in England and Northern Ireland and the Court of Session in Scotland. The Scheme became effective on March 31.

Details of the Scheme were published in December by two of the joint receivers, Mr Rupert Nicholson and Mr Jim Butler of accountants Peat, Marwick, Mitchell. They said yesterday that Northern Developments had been a lengthy and complicated group receivership involving some 25 subsidiaries and 3,500 secured and unsecured creditors—but the eventual outcome for all creditors is likely to be most satisfactory.

The Administrators of the Scheme are Mr Butler and Mr J. B. Burton, a third partner of Peat, Marwick, Mitchell. Funds available for the repayment of creditors will be passed to them in consultation with a Scheme Committee and they will be responsible for their distribution.

It is blentend that Priority claims—those agreed for less than £25—and Category A claims—those attaching to certain of the group's subsidiaries which appear solvent—will be immediately paid in full according to dividend announcements by the committee on April 7. Other claims will be half paid immediately in agreement with the balance to be paid "as asset realisations proceed."

David Scott closing shoe operations

The David Scott Group is to close its shoe manufacturing operations in August with a loss of 320 jobs and a view to reducing its high bank borrowings.

The company was unavailable for comment last night, but it is understood that the decision to end shoe manufacturing and to sell the wholesale distribution business was interconnected with the acquisition of 20.77 per cent of the company's equity by First Hambli which is a privately owned Northamptonshire based shoe chain.

Before the announcement was made trading in David Scott shares was suspended, but on resumption the price fell 1 1/2 to close at 23p. The company intends to concentrate its efforts in the future on industrial heating equipment and promotional software.

David Scott incurred a pre-tax loss of £367,000 for the six months to July 3 1981 and omitted the interim dividend. The company's main products are medium priced men's shoes and has not developed its other non-food activities to the point where they could have offset the shoe business losses.

ASSOCIATES DEAL

Morgan Grenfell as an associate of Redland is purchased on behalf of discretionary clients 65,000 Redland ordinary at £1.73.

Tenneco launches big divestment programme

BY SUE CAMERON, CHEMICALS CORRESPONDENT

TENNECO, THE U.S. conglomerate, yesterday announced the launch of a \$400m (£294m) divestment programme. The group also confirmed that one of its first sales would be the Bush Boake Allen favours and fragrances division of Albright and Wilson, which it bought only in 1978, particularly as its chemicals operations have been showing a low return compared to some of its other businesses.

Tenneco also plans to sell oil and gas properties in Canada and said it hoped deals on these would be completed soon. The divestment programme will centre on businesses which it believes do not have strong profit potential. Last night, none of the companies involved would say how much was being paid for Bush Boake Allen. Analysts estimate that the price is likely to be about £15m, but some suggest £25m.

Tenneco is known to be anxious to reduce its high interest charges and to raise extra cash to invest in its more profitable businesses.

There has been speculation that it would try to sell off the whole of Albright and Wilson, which it bought only in 1978, particularly as its chemicals operations have been showing a low return compared to some of its other businesses.

But yesterday Tenneco said it intended to continue and develop Albright's other businesses and did not contemplate any further sale of Albright and Wilson divisions.

£1m Fountain buy-out

A £1m management buy-out has been arranged for the sale of Fountain Forestry, the forestry management subsidiary of Stewart Wrightson Holdings, the insurance broking group. Fountain Forestry's executive directors will hold the majority of the equity in the resulting new company—Fountain Forestry Holdings—while other shareholders will include Sharp Investments (SUMIT), the Birmingham based venture capital concern. Fountain Forestry's pre-tax profits were £222,000 in the year to last September 30.

TRICENTROL

Tricentrol, the independent North Sea oil company, has gained acceptance from holders of 88.1 per cent of the ordinary shares of CCP North Sea Associates, the London-based oil exploration company quoted on the London Stock Exchange. The Tricentrol received acceptances equivalent to 6.91m existing CCP shares. The Tricentrol offer, which was recommended by the CCP board, is for 7 new Tricentrol shares and 700p cash for every 10 CCP shares. The offer deadline has been extended to May 19. CCP is valued at about £16m.

The Office of Fair Trading has said Tricentrol that the acquisition will not be referred to the Monopolies and Mergers Com-

mission although the ordinary offer remains conditional on Energy Department assurances that the acquisition will not affect CCP's North Sea production licences.

An extraordinary meeting of CCP is to be held today on the capital reorganisation of the company prior to the takeover becoming unconditional.

INTL. PAINT BUYS BRAZILIAN COMPANY

International Paint, the 88 per cent owned subsidiary of Courtauld's, has purchased Litovert Tintas Graficas, a Brazilian packaging coating manufacturer for US\$55m (£2.5m).

The acquisition boosts International Paint's presence in Brazil and it plans to manage Litovert as a separate company in addition to the existing two subsidiaries it has in the country.

Brazil accounts for some 10 per cent of the international Paint portfolio. Litovert has a modern production plant about 15 miles from Sao Paulo.

MOBEN GROUP

Shareholders of Moben Group have approved an increase in the authorised capital to 60m ordinary shares and the issue of the remaining deferred consideration of 1,719,429 shares to the vendors of Moben Home Improvements.

Jersey. Union Camp, primarily a pulp and paper concern with chemical interests, had sales last year of \$1.7bn (£982m) and net profits of \$168.9m. The group already has a fragrances intermediate plant at Jacksonville in Florida, which has recently been expanded.

The company is keen to expand overseas, particularly in Europe. This year it bought a call oil plant in the North East of England from BOC.

The sale of Bush Boake is subject to any necessary approval from governments and from the boards of Tenneco, Albright and Union Camp.

Albright said yesterday that Union Camp's raw materials position and Bush Boake's expertise in favours and fragrances would "make a strong combination."

Nearly 40% of Empire Stores committed to GUS

BY RAY MAUGHAN

Great Universal Stores has strengthened its grip on Empire Stores (Bradford) with the acquisition of a further 14.88 per cent of the catalogue mail order group.

GUS's £37m share offer, launched last week, has already been assented by the board and family interests in respect of 9.46 per cent of the equity, while institutional holders entered into purchase and sale contracts to sell a further 15.31 per cent.

GUS now controls or can speak for 39.45 per cent of Empire and expects to publish its formal offer near the end of next week.

Sears Holdings, which has been watching developments closely

with a view to a possible counter-bid, acknowledged yesterday that GUS's swift market action had increased the difficulty of mounting effective alternative terms, unless the deal is referred by the Office of Fair Trading to the Monopolies Commission.

GUS understands that the OFT will announce its decision in the latter half of next month.

GUS's financial adviser, S. G. Warburg, acquired the 14.88 per cent holding on behalf of the bidder at 113.1p per share cum dividend and sold them on at the same price. GUS issued 798,000 new "A" ordinary shares to the merchant bank which was placed the stake.

Blackwood disposal

Blackwood Morton and Sons, the carpet manufacturer in Bradford, has sold its BMK Axminster, Wilton and Tufted plant at Kilmarnock to Mr John Logue, an English businessman who has worked closely with the company to reorganise the company.

Blackwood lost £3.75m last year and the shares were suspended at 9p when the Royal Bank of Scotland called in two partners of Deloitte Haskins and Sells as receivers.

The Kilmarnock plant, employing 200 after sweeping redundancies, is almost the sole surviving part of the original Blackwood Morton.

Mr Logue, a former management consultant who owns his own private engineering company based in Stroud, will be BMK's new chairman and chief executive.

REDLAND

Due to problems with the despatch of the circular dated April 27 1982 to Redland shareholders, which contained the notice of an EGM of Redland to be held on May 20 1982, insufficient notice of this meeting was given. Accordingly a new EGM has been convened and will take place at 9.30 am on May 24 1982 at Plaisterrers Hall, EC.

WELBECK INVS.

An approach "which may lead to a formal offer" has been received by the board of Welbeck Investments, the financial services, textiles and printing group—formerly known as Corinthian Holdings. The shares closed up 3p at 45p. Welbeck strongly advise shareholders to take no action pending a further communication from the board.

SHARE STAKES

English China Clays—Lord Abernethy, a director, has disposed of 25,000 ordinary

New-look Stewart Nairn set for return

BY RAY MAUGHAN

DEALINGS in Stewart Nairn are expected to re-start on May 24 after a suspension of almost nine months, as the former hosiery and knitwear group comes back to the market in vastly different guise.

Given shareholders' approval at an extraordinary meeting on May 18, the last of the group's knitwear subsidiaries will be sold to its management, and Stewart Nairn will acquire substantial property assets in Sharjah, the third-largest mem-

ber of the United Arab Emirates Federation, and in Pennsylvania.

The Sunbro Hosiery offshoot has been closed and most of its assets have been sold for cash. The Syton Products and Maidment Knitwear companies have been sold to one of the Maidment directors for £100. The sale, for a nominal sum of these subsidiaries rather than disposal of their assets is explained by their low estimated value in relation to book costs and the likelihood of substantial redundancy pay-

ments. The closures and disposals leave Stewart Nairn as a small cash shell before the injection of a property portfolio by Bukhatir Investments.

Sharjah-based and wholly-owned by Mr A. R. Bukhatir, the chairman of the National Bank of Sharjah, BIL is to receive £2.33m for a 50 per cent interest in Al Hamba Villas, a residential development in Eastern Sharjah, four units in industrial Area 4 in Sharjah, and a half

share in a 661-acre industrial development site in the Great Valley Corporate Centre in Chester County, Pennsylvania.

Stewart Nairn's shares were suspended at 10p in August last year but, after a year of continued losses and substantial write-offs against asset disposals, the consideration for the property portfolio is to be satisfied by the issue of 31,986 new shares to BIL at 5p par value and the issue of £729,000 of subordinated convertible loan notes.



THE EAST LANCASHIRE PAPER GROUP LTD.

Extracts from the statement of the Chairman, Mr C. G. Seddon

"The Group's profit of £569,109 for 1981 reflects the effects of weak demand and severe cut price competition. A more significant recovery in the Group's performance during 1981 has been hampered by the substantial reorganisation within the Merchant Group coupled with the need of E.S.M. (formerly Waldorf Stationery and Greetings Cards) to continue trading longer than anticipated in loss making lines in order to ensure the sale of the gift stationery side of the business.

"After a slow start in January business is now picking up with improved results coming through although there is no indication of a consistent improvement across all sectors of the Group's business."

The year in brief

	1981	1980
Turnover	£43,354	£38,563
Profit before taxation	569	103
Distributable profit	92	225
Ordinary dividends	191	191
Earnings per share	7.3p	14.5p
Dividend per share	3.5p	3.5p

Copies of the Annual Report and Accounts can be obtained from the Company Secretary, The East Lancashire Paper Group Limited, Church Street East, Radcliffe, Manchester M26 9PR.

This Advertisement is issued in connection with the requirements of the Council of The Stock Exchange. It does not constitute an invitation to any person to subscribe for or to purchase any securities of the Company.

MARKHEATH SECURITIES PLC

Incorporated under the Companies Acts 1948 to 1967. Number 1064763

Authorised	SHARE CAPITAL	Issued Fully Paid
£		£
675,000	54.6 per cent. Cumulative Convertible Preferred shares of 25p each	675,000
1,575,000	Ordinary shares of 25p each	1,575,000
250,000	Unclassified shares of 25p each	—
<u>2,500,000</u>		<u>2,250,000</u>

Application has been made to the Council of The Stock Exchange for the whole of the issued 2,700,000 54.6 per cent. Cumulative Convertible Preferred shares of 25p each in the capital of the Company to be admitted to the Official List. Particulars of the Company are available in the statistical services of Extel Statistical Services Ltd., and copies of such particulars may be obtained during usual business hours on any weekday (Saturdays and Bank Holidays excepted) up to and including 14th May, 1982 from:

SHEPPARDS AND CHASE
Clements House, Gresham Street, London EC2V 7AU.

THYSSEN

Thyssen Information

In fiscal 1980/81, the Thyssen Group had to overcome a sharp slump. The aggravation of the European steel crisis severely affected our steel and specialty steel divisions. In the capital goods and manufactured products division, structural problems in certain domestic business sectors still led to considerable burdens; abroad, the continuing slack US demand for cars had adverse effects. The trend in our trading and services division remained gratifying. This also holds true for income from profit and loss transfer agreements. All in all, the 1980/81 result was not satisfactory.

Thyssen AG's net income — after release of Group reserves — totalled DM 52 million. On March 26, 1982, the stockholders' meeting decided to use this amount for a cash dividend of DM 2.00 per nominal DM 50.00 share, i.e. 4%. In addition, foreign stockholders will be reimbursed DM 0.23 per share by Bundesamt für Finanzen.

The overall economic situation so far has not improved during the current 1981/82 fiscal year. This holds true for the Federal Republic of Germany as well as worldwide. Nevertheless, the prospects for the Thyssen Group have improved.

Steel sales during the first five months of fiscal 1981/82 increased by 16%. With shipments practically remaining at last year's level, the increase in sales is therefore due to better revenues per ton. EC steel market regulations will be continued. The steel industry needs prices for its products with which it can operate economically. Otherwise it will suffer a decline in its technical efficiency. Thyssen's specialty steel division has well-balanced capacities, a high-grade product mix and a close-to-the-customer sales organization. During the past few months of fiscal 1981/82 sales have risen by 2%.

Thyssen Industrie is making progress. In particular as a result of several major export orders, Thyssen Industrie's orders on hand totalled DM 5.5 billion at the end of February. For the present fiscal year we are anticipating improved earnings.

The present situation of The Budd Company, our US subsidiary, is markedly influenced by the US automobile crisis. Budd's production facilities are being further streamlined. Because of its technical potential and its good market position, the company anticipates a significant improvement as soon as US car purchases rise again.

Our trading and services division continues to fare well. Thyssen Handelsunion is today operating worldwide in a great number of branches. During the

first five months of fiscal 1981/82 sales went up by 25%. In the international plant engineering business, orders on hand have so far reached more than DM 5 billion.

Thyssen worldwide 1980/81 (October 1, 1980 – September 30, 1981)

Total sales of the divisions		Labour force; annual average	149,800
Steel	DM 8.4 bill.		
Specialty steel	DM 3.0 bill.		
Capital goods and manufactured products	DM 9.3 bill.	From the balance sheet	
Trading and services	DM 14.6 bill.	Balance sheet total	DM 18.1 bill.
Total sales		Equity	DM 3.1 bill.
Thyssen Group	DM 35.3 bill.	Capital expenditure	DM 1,227 mill.
Intercompany sales	DM 7.1 bill.	Depreciation & amortization	DM 1,081 mill.
External sales		Dividend	DM 52 mill.
Thyssen Group	DM 28.2 bill.		



THYSSEN AKTIENGESELLSCHAFT

REPUBLIC OF PORTUGAL 5% DOLLAR BONDS 1979/84

Notice is hereby given that, in accordance with the terms of the General Order...

From date of issue on the bonds drawn will cause to be cancelled the definitive numbers of the bonds concerned...

Table of bond prices and details for the Republic of Portugal 5% Dollar Bonds 1979/84, listing various bond types and their market values.

LONDON TRADED OPTIONS

April 29, Total Contracts 1772 Calls 1419 Puts 353

Table of London Traded Options, showing call and put options for various companies like BP, Shell, and Anglo.

EUROPEAN OPTIONS EXCHANGE

Table of European Options Exchange, listing various stock options and their trading volumes.

RESULTS AND ACCOUNTS IN BRIEF

FRIZZELL GROUP (Insurance) - Results for 1981 reported April 13...

TENDERS FOR GREATER LONDON BILLS

The Greater London Council hereby invites tenders for the purchase of Greater London Bills...

DE BEERS CONSOLIDATED MINES LTD

De Beers Consolidated Mines Limited announces that for the redemption period...

THE PHILIPPINE INVESTMENT COMPANY SA

The Philippine Investment Company SA, a Luxembourg company, is seeking investors...

DE BEERS CONSOLIDATED MINES LTD

De Beers Consolidated Mines Limited announces that for the redemption period...

MINING NEWS

Energy interests keep Newmont in profit

BY GEORGE MILLING-STANLEY

BOOSTED BY its energy interests, Newmont Mining of the U.S. has reported a profit for the first quarter of this year...

East Dagga in new hands

A RELATIONSHIP of 50 years came to an end yesterday, when Anglo American Corporation of South Africa formally relinquished its position at the annual meeting...

Approval for Cornish tin mine

CORNWALL'S county council has given formal planning permission for a full-scale tin mining operation over the next 60 years...

Rio Algom profits fall

Canada's Rio Algom, 52.7 per cent-owned by London's Rio Tinto-Zinc group, reports consolidated net earnings of C\$9.13m...

Philippines to aid metal producers

THE GOVERNMENT of the Philippines is putting together a package of financial assistance for its beleaguered mining industry...

BRAZIL CARAJAS IRON ORE PROJECT

INTERNATIONAL PREQUALIFICATION SELECTION FOR CONSTRUCTION COMPANIES

PREQUALIFICATION NUMBER 001/82

Companhia Vale do Rio Doce—CVRD invites the construction companies interested in participating in the prequalification for the performance of civil works at the Carajás Mine...

The civil works relating to this prequalification of companies are disseminated into the following contract packages:

- Package M14 - civil construction of industrial buildings at the Mine, including embedded systems, siding, roofing and civil works for utilities networks;
Package N4 - construction of 259 single-family houses, 4 apartment buildings and 2 bachelor housing units;
Package N5 - construction of 371 single-family houses, 7 apartment buildings and 2 bachelor housing units;
Package N6 - construction of 12 non residential buildings as hotel, administration building, super markets, club, etc.

The International Prequalification Selection Documents will be available upon written request to the General Construction Manager until May 31st, 1982 at the following address:

Superintendência de Implantação do Projeto Carajás
Gerência Geral de Engenharia de Construção
Av. Marechal Câmara N.º 150-7.º Andar
Telex (021) 22544

The prequalification documents will be received at the above mentioned address on June 30th, 1982 at 09.30 a.m.

Rio de Janeiro, 30th April, 1982
Renato G. Moretzsohn
Carajás Project General Manager

COMMODITIES AND AGRICULTURE

EEC farm price compromise plan

BY LARRY KLINGER

THE EEC's agriculture ministers yesterday began negotiating a new set of compromise proposals...

Main elements of the compromise proposals are: MILK: the across-the-board 2.5 per cent rise on production...

GREEN MONEY rates: Revaluations by West Germany of 2.9 per cent (previously 4) and the Netherlands of 2 per cent (3)...

The Commission provisionally estimates the extra cost of the proposals as now stand at \$217m against \$417m for its original proposals.

and not change for Britain (2.5 per cent revaluation). WINE: complex arrangements aimed at establishing a guaranteed minimum price equal to 85 per cent of the EEC's national guide price...

support spending this year is estimated at around \$7.7m. Mr Poul Dalsager, the Commissioner for Agriculture, said the cost of the measures for this

that in overall EEC income. However, a record price award of between 10.5 per cent and 11 per cent seems on the cards...

NZ seeks lamb-for-oil deal

BY DAI HAYWARD IN WELLINGTON

A LAMB for oil deal between Iran and New Zealand will soon be finalised. A team of New Zealand negotiators have just returned after several weeks of complicated negotiations...

It is understood the agreement being negotiated will be a three-way deal. New Zealand will not take physical possession of the oil but will play a hand in its sale to a third party.

This should overcome the biggest problem hindering the signing of a new NZ-Iran lamb

contract this season. Last year Iran had problems paying for the 100,000 tonnes of NZ lamb it bought and on NZ's side the Meat Board stopped the sailing of four loaded meat ships.

Mr Adam Begg, Chairman of the Meat Board, confirmed last night that the total package included the sale of oil and purchase of NZ lamb.

The tonnage of lamb involved could be up to 70,000 tonnes but the final quantity will depend on the ease of disposing of the oil made available for the deal.

Soviet coarse grain imports rise

BY OUR COMMODITIES STAFF

THE SOVIET UNION will have imported 23m tonnes of coarse grains to feed its livestock by the end of the current July-June crop year.

In Moscow, meanwhile, a senior Soviet agricultural official said special emphasis was being placed on forage grain production within the country's efforts to improve on recent poor crop performance.

When asking for a change in legislation I have seldom seen much in the way of concrete proposals of how the position of a displaced son is to be ameliorated...

management, his own or employed, there is no reason why it should not earn the landlord more in hand than when let. There is also the position of tenants' sons who are hopeful of succeeding their fathers.

John Cherrington

Commodity trade group reformed

Lonconex, ring-dealing members of the London Metal Exchange, is to be reformed, effective from May 4, to handle all the futures business in the group, which includes M. Golodetz and Primary Industries.

Under the new arrangement M. Golodetz would continue to trade in physical commodities and Primary Industries in physical metals.

Larger tin output cut planned

BY WONG SULONG IN KUALA LUMPUR

MALAYSIA is seriously considering cutting back its tin exports by more than the amount sanctioned by the International Tin Council.

He did not give a figure or percentage, but said the cut would be "what the market can take".

Under the ITC export control programme, decided in London over the weekend, the seven tin producing countries, Australia, Bolivia, Indonesia, Malaysia, Nigeria, Thailand and Zaire, are to reduce exports by 4,500 tonnes or 15 per cent of their projected supply to the end of June as a last resort to check falling prices.

Malaysia, the world's biggest tin producer, was given a quota of 9,048 tonnes. Last February, the Malaysian Prime Minister, in an interview with the Financial Times, said he wanted Malaysia to cut tin output by as much as 25 per

cent over the next couple of years. This was to conserve depleting natural resources. At the same time, efforts would be made to develop copper and other metal deposits found in the country.

The Primary Industries Ministry is now working on a plan to implement the ITC decision. Ministry officials will meet the chamber of mines to distribute quotas next week.

Copper down sharply

BY JOHN EDWARDS, COMMODITIES EDITOR

COPPER prices dropped sharply on the London Metal Exchange yesterday following the decline in gold and continued pessimism about the outlook for the U.S. economy.

On the London gold futures market the August position closed \$3 lower at \$201.55

Meanwhile, it has been confirmed that the mining ministers from Indonesia, Thailand and Malaysia will meet in Kuala Lumpur from May 14 and 15 to discuss the tin situation.

It is perhaps an indication of the easier times through which we have been passing since the 1930s that the National Federation of Young Farmers Clubs is holding its 50th annual meeting and convention in Blackpool this weekend.

Its basic aims were educational. During the war and post-war years it was supported by the Government, primarily as a means of getting new ideas through to the farming industry which was thought to be too cautious to adopt them outright.

Things did not work out in

FARMER'S VIEWPOINT

No room for young blood

I WAS never a member of a Young Farmers Club for the simple reason that the movement had not come into being until I was already involved in the basic facts of farming in the depression. Then there was no alternative to a seven-day grind of working, eating and sleeping.

But marriage is far from being the YFC's main consideration these days. The members are lamenting the fact that there are few chances for them to ascend the farming ladder. The main motion on the agenda at Blackpool concerns the difficulties of young farmers acquiring capital and even more importantly finding farms, however small, on which to start.

They are particularly upset by the fact that offers of rented farms have practically disappeared. For this the security given to tenants, and particularly to tenants' families, has been blamed.

quite that way. Membership was never confined to farmers' families. A proportion of urban children have always been keen on going into farming and the YFC movement provided the best sort of youth club. A mixture of education, social life and the possibility of marrying a farmer's son or daughter into the bargain.

Whatever Labour decides Mr Walker is probably more concerned of other factors governing landlord letting decisions. Present taxation rules are still unfavourable to earnings from landowning compared with those from farming. Rents are classed as unearned income. At the same time because of the demand for land with possession, values of a vacant farm are double that of one which is let.

Landlords are unwilling to let

their farms preferring to take them in hand themselves. The Country Landowners Association and the National Farmers Union — the latter rather ambivalently — have agreed that this should be changed in a modest way and the YFC is pressing hard. So far the Minister of Agriculture has refused to inaugurate legislation on the grounds that there would be every chance that it would be reversed by a Labour Government which is contemplating including in its manifesto a proposal to nationalise rents.

When asking for a change in legislation I have seldom seen much in the way of concrete proposals of how the position of a displaced son is to be ameliorated, nor any guarantee from the CLA that more farms would be available to rent. The general opinion among those who should know — chartered accountants — is that only if the fiscal disadvantages of being a landlord were removed would there be much incentive for them to let more land.

John Cherrington

BRITISH COMMODITY MARKETS

BASE METALS

Table with columns for metal type, price, and change. Includes Copper, Lead, Zinc, Tin, and Aluminium.

ALUMINIUM

Table with columns for aluminium grades and prices.

NICKEL

Table with columns for nickel grades and prices.

SILVER

Table with columns for silver grades and prices.

Wool

Table with columns for wool grades and prices.

POTATOES

Table with columns for potato grades and prices.

MEAT/VEGETABLES

Table with columns for meat and vegetable prices.

INDICES

Table showing various financial indices and their values.

DOW JONES

Table showing Dow Jones index values.

REUTERS

Table showing Reuters index values.

SOYABEAN MEAL

Table with columns for soyabean meal grades and prices.

COFFEE

Table with columns for coffee grades and prices.

GAS OIL FUTURES

Table with columns for gas oil futures grades and prices.

SUGAR

Table with columns for sugar grades and prices.

GRAINS

Table with columns for grain types and prices.

WHEAT

Table with columns for wheat grades and prices.

COTTON

Table with columns for cotton grades and prices.

EUROPEAN MARKETS

Table with columns for European market prices.

AMERICAN MARKETS

Table with columns for American market prices.

WEDNESDAY'S CLOSING PRICES

Table with columns for Wednesday's closing prices.

Advertisement for InterCommodities Limited, featuring contact information and a coupon for more details.

INTERNATIONAL COMPANIES and FINANCE

Ford deficit \$355m in first quarter

BY PAUL BETTS IN NEW YORK
FORD MOTOR, the second largest U.S. carmaker...

and margins squeezed by car company discounts and other promotional devices...

of \$303m in the first quarter, against \$17m a year ago...

While unit sales were 14 per cent lower in the U.S. and 48 per cent lower in Canada...

Hoover edges back into the black

BY RICHARD LAMBERT IN NEW YORK
HOOPER, the U.S. domestic appliance group...

Du Pont's Eurobond hit by deteriorating market

BY ALAN FRIEDMAN
DU PONT'S new \$200m 13 1/2 per cent Eurobond...

Pont are said to be reluctant to purchase this bond when they can obtain better returns...

Prices of recent Eurodollar bonds fell on average yesterday by 1/2 to 1 point in light trading...

Kodak hit by currency translation

BY OUR NEW YORK EDITOR
EASTMAN KODAK, the world's largest maker of photographic prints...

Panama stake in Kaiser Cement

BY OUR FINANCIAL STAFF
KAISER CEMENT, the seventh largest U.S. cement producer...

According to Kaiser Cement, Li, who controls Cheung Kong (Holdings), the property group...

shipped from \$53.5m to \$44.4m. The company has recently been suffering from the recession in the U.S. construction industry...

Gothenburg in U.S. commercial paper issue

BY PETER MONTAGNON, EUROMARKETS CORRESPONDENT
GOTHENBURG has become the first city outside the U.S. to issue commercial paper in the New York market...

Pan-Arab banks in Egyptian loan

BY RICHARD JOHNS, MIDDLE EAST EDITOR
EGYPT HAS achieved what appears to be a significant breakthrough towards reconciliation with the rest of the Arab world...

Perhaps the most surprising participant from the political point of view is the Paris-based U.A.F.A. whose shareholders include institutions of the more radical states...

by the Central Bank of Egypt and still has its headquarters in Cairo. United Gulf Bank is predominantly owned by Kuwaiti institutions and individuals...

Recovery seen by Massey

BY OUR TORONTO CORRESPONDENT
MASSEY-FERGUSON, the world's largest tractor manufacturer and second-largest maker of combines...

Brascan plans extra dividend

BY OUR FINANCIAL STAFF
BRASCAN, the Toronto-based energy group, proposes to pay an extra 20 cents a share in addition to its regular quarterly dividend of 40 cents a share...

Mr. Eytton declined to make a specific estimate because of uncertainties over interest rate levels and the company's natural resources operations...

president said Westmin was looking at acquiring the company's position in Brascade.

Sharply higher loss at UAL

BY OUR FINANCIAL STAFF
UAL, holding company for United Airlines, the largest U.S. increased first quarter net losses of \$129.3m or \$4.37 a share...

FT INTERNATIONAL BOND SERVICE

The list shows the 200 latest international bond issues for which an adequate secondary market exists...

Dart and Kraft earnings fall despite sales increase

BY OUR FINANCIAL STAFF
A FALL in earnings in the first quarter at Dart and Kraft was not unexpected, said analysts in view of the general economic recession...

Intel now challenges the computer majors

BY LOUISE KEHOE IN SAN FRANCISCO
INTEL, THE California electronic chip maker, is taking IBM and the other majors of the computer industry to fight for a share of the business computer market...

S and L unit boosts Entex

BY TERRY BYLAND
A SUBSTANTIAL gain in profit at its savings and loan subsidiary boosted third quarter profits at Entex, the Houston-based company whose operations lie mostly in the energy business...

Gothenburg in U.S. commercial paper issue

BY PETER MONTAGNON, EUROMARKETS CORRESPONDENT
GOTHENBURG has become the first city outside the U.S. to issue commercial paper in the New York market...

NORTH AMERICAN QUARTERLY RESULTS

Table with multiple columns showing quarterly financial results for various companies like AIR FLORIDA SYSTEM, BAKER INTERNATIONAL, CORROON AND BLACK, etc.

U.S. DOLLAR

Table showing U.S. Dollar exchange rates and market movements for various currencies.

DEUTSCHE MARK

Table showing Deutsche Mark exchange rates and market movements for various currencies.

FLUATING RATE

Table showing floating rate exchange rates and market movements for various currencies.

CONVERTIBLE BONDS

Table showing convertible bond market data including issuer, price, and yield.

NORTHERN STATES POWER

Table showing quarterly results for Northern States Power.

SWISS FRANC

Table showing quarterly results for Swiss Franc.

ODEN CORPORATION

Table showing quarterly results for Oden Corporation.

PANHANDLE EASTERN

Table showing quarterly results for Panhandle Eastern.

MARYLAND CUP CORPORATION

Table showing quarterly results for Maryland Cup Corporation.

PEABODY INTERNATIONAL

Table showing quarterly results for Peabody International.

MESA PETROLEUM

Table showing quarterly results for Mesa Petroleum.

NOBLE AFFILIATES

Table showing quarterly results for Noble Affiliates.

PURULOTOR

Table showing quarterly results for Purulotor.

YEN STRAIGHTS

Table showing quarterly results for Yen Straights.

YEN STRAIGHTS

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Table showing quarterly results for Yen Straights.

Vertical text on the right edge of the page.

Terry Dodsworth reports on the French construction group with big ideas

Bouygues champions red-blooded capitalism

IF FRENCH capitalism were the red-blooded animal that many opponents of nationalisation claim, it would have many more companies like Bouygues. Virtually unknown until a few years ago, Bouygues (pronounced Boo-egg), has burst on to the international construction industry scene with huge projects such as the \$1.9bn Riyadh University project or the FFr 4.5bn (\$726m) power station in Nigeria. Its latest idea, for a FFr 35bn (\$5.6bn) Channel Bridge, gives a flavour for the sort of company it is. Bouygues likes the big, glamorous schemes that catch the eye and yield tasty margins. The company is a post-war creation, founded in 1951 by M Francis Bouygues, a burly, hard-driving engineer, who has elbowed it ruthlessly into the front ranks of the industry. In the last five years, its growth has been explosive, with sales rocketing from FFr 2.9bn in 1976 to FFr 10.5bn last year. Profits have followed, from FFr 18.2m net to FFr 219m, generating healthy cash-flows and enabling the company to pay about FFr 370m from its own resources for Drouot, the insurance company. Along this dizzy growth path, M Bouygues has made enemies and run into plenty of criticism. The company was accused of having strong—some said too strong—links with the Gaullists. It has also been attacked for its paternalistic employment system, which includes a special group of favoured company faithfuls who subscribe to a sort of Scouts' code ("We are a fighting community welcoming any challenge," says Article No 6) in return for special benefits. M Bouygues, however, shrugs off the criticism. He believes in the family style of management. For him, the recently nationalised French companies were already bureaucratized to such an extent that State takeover was virtually irrelevant. He wants something different at Bouygues. Asked recently about the future of the company, he said that his sons could do what they liked with it, but that they had a pretty good model to go by if they wanted to succeed. He is not known, either for mixing his words. When M Andre Giraud, Industry Minister in the last government, crossed him in a project to expand the group's offshore activities, he unhesitatingly unleashed a strong verbal rebuke in public. He is also highly critical of the present government's employment policies, attacking both the decision to relax pressure on immigrants to leave France, and the idea of reduced working hours. "What people want are longer working hours," he says, arguing that this would generate more activity and wealth. At 59, after a serious operation that left him with only one lung, M Bouygues is clearly preparing the way for an eventual family succession. He has two sons, Nicolas and Martin, both in their early 30s, already in senior positions in the company. But what sort of company does he want to leave behind? This is the question agitating the Paris Bourse after the group's recent, and contested, bid for Drouot, one of France's largest private insurance groups. The character of the group has changed so rapidly in recent years that it is not easy to see where Drouot fits in. Until 1970, when Bouygues went public, the company was little more than a highly ambitious building concern that had ridden the wave of expansion in Gaullist France with great skill. As France launched its rebuilding programme, it had steadily grown from construction in the Paris area, to regional development throughout the country. Public contracts, whether for council housing, motorways or



M Francis Bouygues (left) has pushed his company into the front ranks of the French construction industry. In five years, after-tax profits have soared from FFr 18.2m to FFr 219m as a result of its appetite for the big, glamorous schemes. Its latest idea is a FFr 35bn plan for a Channel bridge.

nuclear power stations, always formed a big part of its order book. But in the last decade Bouygues has been gradually growing an international division to balance its activities in France. It realised that its increasing size made it particularly vulnerable to any downturn in the market which was to be expected after the wave of Gaullist-inspired expansion had passed. This period of reduced activity seems to have arrived. While France still has a big nuclear power programme, and President Mitterrand entertains some very ambitious ideas for public buildings in Paris, few analysts believe that the pace of the 1980s and early 1970s can be maintained. Last year Bouygues' public works programme in France fell marginally for the first time in its history, and is expected to drop by another 10 per cent this year. The company is trying hard to maintain growth in sectors which are still lively, such as public housing or private house-

building, where its recently-launched Maisons Bouygues promotion system has quickly taken a big share of the market. But foreign business forms an important part of its overall expansion plan. Concentrating on Francophone West Africa and the Middle East, it has rapidly expanded its overseas sales from FFr 311m in 1976 to FFr 2.7bn last year. This year it expects to generate FFr 5.2bn in foreign markets. Yet M Bouygues is clearly conscious that the overseas business is a fairly high risk. Despite the reportedly tough commercial practices of the company, which apparently insists on substantial forward cover for its projects, it has generated much of its turnover in Iran and Iraq, where the political dangers are obvious; or in West Africa, where the economic fragility of the different countries is an equal problem. This anxiety does not mean that Bouygues might backtrack on its overseas growth. On the contrary, it has big plans for development, both territorially

Turnover at Nestle hit by strength of franc

By John Wicks in Lugano

NESTLE, the Swiss foods group, estimates that turnover has dropped by 6 to 7 per cent in the first quarter of this year, mainly because of the strength of the franc. Mr Helmut Maucher, managing director, said turnover had also been affected both by the world recession and the divestment of unprofitable operations. It should not be assumed that earnings would develop in the same way. No dramatic changes were anticipated for profits to this year, he said. Last year net profits rose by 41 per cent to SwFr 964m (\$494.4m), a performance that Mr Maucher described as a "normalisation" of profits for this year, he said. Nestle is to continue its efforts to improve earnings potential, concentrating on profitable product groups and selling off or closing down long-term loss activities. Last year the major divestment was the canned fruit and vegetable operation of the U.S. subsidiary, Libby. Nestle has introduced "a more restrictive" investment policy. In 1981 capital expenditure dropped from SwFr 1.21bn to SwFr 1.11bn. The issue is still frozen, and the judgment will probably take another two months to come through. During that period, Bouygues' investment will be tied up in a bank ready to be paid back if the deal is nullified. M Bouygues, who likes a scrap, is patently amused to find himself under attack in a situation where he believes he cannot lose. "If we lose the court case, we get the money back," he says. "If we win, we get Drouot." That's the sort of capitalism he likes.

Aerospatiale sees strong recovery

BY DAVID WHITE IN PARIS

AEROSPATIALE confirms the sharp recovery in its financial position over the last three years by announcing provisional 1981 earnings of between three and four times the previous year's figure of FFr 119m (\$19m). General Jacques Mitterrand, who was seconded from the French Air Force to head the state-owned aerospace group when it was suffering heavy losses in the mid-1970s, said its outstanding bank debts have been slimmed to about FFr 600m from FFr 2.2bn a year ago. Turnover increased to FFr 16.5bn from FFr 13.2bn and the company's order book at the end of the year was up to FFr 46bn from FFr 34bn. General Mitterrand, younger brother of the French President, was cautious about prospects for the current year. This year will see the conclusion of an agreement on the next A-320 generation of the Airbus, in which Aerospatiale is the French partner. The company plans capital investments of FFr 1.2bn this year, compared with FFr 945m last year. Aerospatiale is also involved in a Franco-Italian project for a short-haul aircraft, the ATR 42. But General Mitterrand expressed concern about the state of European co-operation in both the civil and the military sectors.

Steep advance in Jacques Borel operating profit

BY OUR PARIS STAFF

JACQUES BOREL International, the French catering business, quadrupled operating profits last year after selling its troubled hotel interests. Turnover of the group, excluding Sofitel, climbed to FFr 2.5bn last year from FFr 2.1bn. The company said that results so far this year were up on the same 1981 period, confirming the recovery from a lengthy period of financial difficulties which followed Borel's entry into the hotel business. But it said that its Belgian subsidiary was still facing problems and that some new projects had suffered larger start-up losses than had been expected. Net profits of FFr 3.4m compared with a result FFr 32m—due solely to the sale of the Sofitel luxury hotel subsidiary

Swedish iron mining group's losses rise

BY WILLIAM DULLFORCE IN STOCKHOLM

LKAB, the Swedish state-owned iron mining company, made a pre-tax loss of SKr 662.6m (113m) last year, SKr 110m more than in 1980. Sales, of which 87 per cent come from iron ore, fell by 3 per cent to SKr 2.24bn. The new management aims to achieve a positive cash flow by the end of 1982. It forecasts a strong improvement in financial performance already this year as a result of the SKr 1.5bn capital transfusion from the Government, cuts in rail freight charges and the strength of the dollar. The company, which has worked the famous north Swedish iron mines since the late 19th century, has accumulated losses of SKr 2.84bn in the period from 1976 to 1981. LKAB's share of the EEC iron market plunged from 22 per cent to 14 per cent in the 1970s, of which a year in Europe, of which The recovery programme assumes the company can sell an average of 25m tonnes of at least 20m tonnes would be taken by the EEC. Last year LKAB delivered only 18.2m tonnes worldwide, a decline of almost 3m tonnes from the previous year and the lowest total recorded since 1963. An increase in deliveries to the EEC implies the negotiating of long-term agreements with LKAB's main customers. Mr Wiking Sjostrand, managing director, said. The financial target implies a 30 per cent improvement in output per employee by the end of 1982. LKAB has already started talks with the trade unions about dismissing employees. Freight charges for carrying ore by rail to the port of Narvik in northern Norway have amounted to about SKr 700m a year and have given a good profit to the Swedish state railways.

Reksten tanker subsidiary to be wound-up

By Fay Gjester in Oslo

HADRIAN, a subsidiary company of the troubled Reksten tanker group, is being wound up as a result of the recent agreement settling the Reksten affair. Under the deal between the Norwegian state-backed guarantee institute (GI) and Reksten's creditors, including Hambros Bank, the four large tankers operated by Hadrian were taken over by other parties. This left Hadrian with a large accumulated deficit — Nkr 567m (\$83.4m), at end of 1981, and no assets. Two of Hadrian's tankers were acquired by Hambros Bank and will in future be operated on the bank's behalf by Traitan. Hadrian's parent company, Traitan, also manages five other Reksten ships acquired by Hambros. Hambros has a 10 per cent stake in Traitan, which also has no equity. One of Hadrian's other two ships has been taken over by the Norwegian shipping company Berresen and the other by an ad hoc partnership comprising the Norwegian company holding first priority mortgages in the vessel.

West German engineer raises nine-month sales

BY OUR FINANCIAL STAFF

GHH, the major West German engineering group, increased group turnover by 12.7 per cent to DM 12.8bn (\$3.4bn) in the first nine months of the current fiscal year which ends in June compared with the same period of the previous year. Herr Siegfried Schiffbauer, board member, said in Hannover, that earnings, however, were not keeping pace with turnover growth. In the first nine months, GHH's order inflow totalled DM 15.4bn, up 18 per cent from DM13.04bn, foreign orders shot up 23.8 per cent to DM 9.1bn, while domestic orders climbed 10.3 per cent to DM 6.3bn. The group's order backlog on March 31 stood at DM 19.6bn compared with DM 17bn at the end of the first nine months of 1980-81. Krupp Stahl, the West German steelmaker, plans to take over P. W. Lenzen of Isarohrn, a small producer of cold-rolled speciality steel. The companies said yesterday the acquisition must still be approved by both the European Commission and the West German Cartel Office. The purchase price was not disclosed. Lenzen has about 320 employees and annual sales of about DM 100m.

This announcement appears as a matter of record only.



FIRST GULF REAL ESTATE COMPANY

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Kuwait Foreign Trading Contracting & Investment Co. (S.A.K.)

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Al Bahrain Arab African Bank (E.C.) (Albaab) Banco Arabe Espanol, S.A. (Aresbank)

Provided by

Arab Trust Company K.S.C. Bungan Bank S.A.K. The Commercial Bank of Kuwait SAK The Gulf Bank K.S.C.

Kuwait Foreign Trading Contracting & Investment Co. (S.A.K.)

Al Bahrain Arab African Bank (E.C.) (Albaab) Banco Arabe Espanol, S.A. (Aresbank) Arab Hellenic Bank S.A.—Athens Kuwait Real Estate Bank K.S.C.

Agent

الشرق الأوسط للتجارة والتأمين والتأجير العقارى وشركات الاستثمار الكويتية

Kuwait Foreign Trading Contracting & Investment Co. (S.A.K.)

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Trading & Contracting Co.

U.S. \$30,000,000 Medium Term Loan

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Co-Managed by

Al Bahrain Arab African Bank (E.C.) (Albaab) Bank of Bahrain and Kuwait B.S.C.

Provided by

Arab Trust Company K.S.C. The Commercial Bank of Kuwait SAK Kuwait Foreign Trading Contracting & Investment Co. (S.A.K.)

Al Bahrain Arab African Bank (E.C.) (Albaab) Bank of Bahrain and Kuwait B.S.C. Kuwait Real Estate Bank K.S.C. Arab Hellenic Bank S.A.—Athens Kuwait International Investment Co. s.a.k. The Gulf Bank K.S.C.

Agent

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Kuwait Foreign Trading Contracting & Investment Co. (S.A.K.)

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BANCO NACIONAL ULTRAMARINO

February 1982

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U.S. \$50,000,000

Kansallis - Osake - Pankki

(Incorporated with limited liability in Finland)

Floating Rate Capital Notes 1992



The offering price of the Notes is 100 per cent. The Notes have been admitted to the Official List by the Council of The Stock Exchange, subject only to their issue.

Full particulars of the Notes and of Kansallis - Osake - Pankki are available in the Extel Statistical Service and may be obtained during usual business hours on any weekday (Saturdays and public holidays excepted) up to and including 14th May, 1982 from the brokers to the issue:

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12 Tokenhouse Yard, London EC2R 7AN.

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Notice is hereby given pursuant to the Terms and Conditions of the Notes that for the six months from 30th April, 1982 to 29th October, 1982 the Notes will carry an interest rate of 15 3/4% per annum. On 29th October, 1982 interest of U.S. \$398.13 will be due per U.S. \$5,000.00 Note for Coupon No 2. The Conversion Interest amount applicable to Notes which are presented for conversion on or before 1st October, 1982 will be U.S. \$418.75 per U.S. \$5,000.00 Note.

European Banking Company Limited (Agent Bank)

30th April, 1982

This announcement appears as a matter of record only



Banco Valbras de Investimento S.A.

US \$40,000,000
Medium-Term Loan

under Resolution 63 of Banco Central do Brasil

Arranged by
Crédit Commercial de France

Provided by

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Agent

Bankers Trust Company

February 1982

Companies
and Markets

INTERNATIONAL COMPANIES and FINANCE

Earnings collapse at Malaysian tin smelter

By Wong Sulong in Kuala Lumpur

DATUK KERAMAT Holdings, one of the two tin smelters in Malaysia, has reported a sharp drop in earnings, and is drastically cutting its dividend.

The company, which is a subsidiary of Preussag, the German metals group, saw net after-tax profits fall by 86 per cent from 17.4m ringgit to 7.6m ringgit (US\$3.2m) for the year ended January. It is paying a final dividend of 45 cents, making 85 cents for the year, compared with 193.75 cents previously. DKH attributed the poor results to "significantly higher operating and financing costs," and the suspension of its tantalum extraction activities because of the collapse of prices for this by-product.

Turnover was marginally up at 91m ringgit, but operating profit was down by 46 per cent to 9.4m ringgit. There were no earnings from the sale of tantalum slabs, compared with a profit of 10.5m ringgit last year. Income from investment rose by only 10 per cent to 4.5m ringgit.

For the current year, prospects are equally depressing. The tantalum price is still too low to encourage renewed extraction, while operating costs are expected to rise when world tin prices show no sign of moving out of their depressed levels.

Australian Guarantee's first half profit up 38%

BY IAN PERKIN IN MELBOURNE

HIGHER RETURNS on personal loans and substantial profits from direct property development helped Australian Guarantee Corporation lift profits 38.5 per cent from AS\$32.56m (U.S.\$34.2m) to AS\$45.1m in the six months to March 31. Total revenue of the group, Australia's biggest finance company which is a subsidiary of the Bank of New South Wales, was up 46.3 per cent from AS\$305.5m to AS\$446.9m (U.S.\$470m) and net receivables rose 16.7 per cent from AS\$2.5bn to AS\$3.3bn. Interim dividend has been increased from 4.375 cents a share to 5 cents a share on existing units and a 2.5 cents a share dividend will be paid on new shares issued in the group's one-for-seven new issue late last year.

Trading at seven-year low

BY OUR MELBOURNE CORRESPONDENT

OVERALL TRADING and profitability of companies operating in Australia were at their worst for seven years in the March quarter of this year, according to the latest Australian Chamber of Commerce-National Bank business survey. The survey shows that only 53 per cent of respondents reported good or satisfactory trading for the March quarter and only 47 per cent good or satisfactory profits for the same period. This compares with responses of 68 per cent for trading and 63 per cent for profits in the previous quarter.

Although some easing in activity usually occurs during the post-Christmas period, the results were well below respondents' expectations. According to ACC-National Bank, the results represented the weakest March quarter results since the same quarter in 1975. Together with the results of two other recent surveys they paint a gloomy picture of the Australian business climate.

Plascon Evans shows slow growth

By Thomas Sparks in Johannesburg

PLASCON EVANS (Plevans), South Africa's largest paint manufacturer which is 80 per cent owned by Barlow Rand, suffered from narrower margins in the six months ended March 31. First half pre-tax profit rose by 4.5 per cent to R12.4m (\$12m) from R11.9m in the corresponding period of 1981. Interim turnover was 18.4 per cent higher at R112.9m against R95.4m. In the year ended September 30 1981, turnover was R199.5m and pre-tax profit R24.23m. An unchanged interim dividend of 6 cents has been declared on per share earnings up to 27.1 cents from 26.1 cents.

Steady advance by Amrel

By Our Johannesburg Correspondent

AMALGAMATED RETAIL (AMREL), the furniture and shoe retail group 69 per cent owned by South African Breweries, increased operating profit before tax and interest by 21.1 per cent to R32.2m (\$30.8m) in the year ended March 31 1982. In the preceding year, operating profit was R26.6m. Turnover rose 35.4 per cent to R219.6m from R176.1m. A total dividend of 71 cents has been declared from earnings of 214 cents a share compared with 65 cents on 196 cents a share last year.

Kuwait Airways takes steps to cut losses

By James Dorsey in Kuwait

KUWAIT AIRWAYS Corporation (KAC) has announced a series of measures, including an employment freeze, to reduce its losses, estimated to be KD 7m (\$26m). The announcement follows last week's call for austerity measures and rationalisation of public expenditure by Mr Abdul Latif al Hamad, the Kuwaiti Finance Minister. Earlier this week the Kuwaiti Government published its budget, which showed a KD 312.6m (\$1,124m) deficit. Mr Ahmed al Zahin, KAC general manager, said that the airline will make no new appointments unless absolutely necessary, until "the optimum utilisation of existing manpower" has been achieved. KAC at present has a payroll of 6,563.

Further measures to cut losses include a review of current flight routes and existing foreign offices. KAC is considering closing two of its European routes and several of its offices abroad. On the other hand, the airline is convinced it will benefit from rising demand by introducing new routes to Algeria and South Korea.

KAC hopes that the launching of a computerised flight planning system will reduce its fuel expenditure by KD 1.5m a year.

The airline also plans to delegate certain activities to subsidiaries like Kuwait Catering Supplies and Aviation Services Company (KCSAS). This subsidiary is expected to cover all of KAC's catering needs by this summer. KAC has requested the help of Scandinavian Airline System (SAS) to develop a self-sufficient catering system and train personnel in in-flight kitchen services.

Improvement at Times Publishing

By George Lee in Singapore

TIMES PUBLISHING Berhad has reported a 19 per cent improvement in group pre-tax earnings to S\$38.37m (U.S.15.4m) for the half year to February. Group trading profit before tax rose by 17.4 per cent to S\$25.8m on the back of a 13.7 per cent rise in turnover to S\$332m.

The group's share of profit from associated companies was 3½ times higher at S\$680,000. However, investment income fell marginally to S\$1.9m.

The group also disclosed an extraordinary loss of S\$1.89m mainly because of currency differences on consolidation. An interim gross dividend of 7 per cent has been declared.

IHF-FIAT FINANCE CORPORATION B.V.

U.S.\$100,000,000
GUARANTEED FLOATING RATE NOTES 1991

For the six months from 30th April, 1982 to 29th October, 1982 the Notes will carry an interest rate of 15½% per annum. On 29th October, 1982 interest of U.S.\$383.91 will be due per U.S.\$5,000 Note for Coupon No. 3. Agent Bank: European Banking Company Limited

Al-Ahli lifts net income

BY MARY FRINGS IN BAHRAIN

AL-AHLI Commercial Bank advanced its net operating income by 67 per cent in 1981, the bank's third year of operation. But overall profit was down from BD 1.1m to BD 794,000 (\$2.1m) because the 1980 result included a substantial element of windfall profits from the handling of offshore company share issues.

The latest result represents a return on average assets of 1.22 per cent. Total assets, excluding contra items, amounted to BD 80.6m and loans and advances totalled BD 48m. The directors declared a 12 per cent cash dividend. During the first quarter of this year, the paid-up capital was doubled to BD 8m through a rights issue at a preferential price of BD 20 per share—a premium of 100 per cent on the nominal value, but well below the level at which Al-Ahli shares have been trading. At the same time the nominal value of the shares was split from BD 10 to BD 1, to bring them within reach of smaller investors.



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London & Continental Bankers Limited
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For the six months from 30th April, 1982 to 29th October, 1982 the Notes will carry an interest rate of 15½% per annum. On 29th October, 1982 interest of U.S.\$383.91 will be due per U.S.\$5,000 Note for Coupon No. 3. Agent Bank: European Banking Company Limited

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In accordance with the provisions of the Notes, notice is hereby given that for the six month Interest Period from 30th April, 1982 to 29th October, 1982 the Notes will carry an Interest Rate of 15½% per annum and the Coupon Amount per U.S. \$5,000 will be U.S. \$383.91.

Credit Suisse First Boston Limited
Agent Bank



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Companies and Markets **INTL. COMPANIES & FINANCE**

Warmer Malaysia-Singapore links help two businessmen
Promet hits its stride

AT THE HEIGHT of the Malaysian share boom in 1981, the one ringgit shares of Promet were chased as high as 11 ringgit. They are now just above 4 ringgit—which is not a bad price for a stock that was quoted at 36 cents before Brian Chang of Singapore and Dato Ibrahim Mohamed took over the company 18 months ago.

For a long time, political and economic ties between Malaysia and Singapore were strained by divergent policies, and often there was downright hostility. Rewarding ventures shared by the two such as a common currency, an airline and a share market were split up, often after acrimonious argument, as each went its way to reduce dependence on the other.

In recent years, however, a new mood of co-operation, unfettered by old political and personal rivalries, has come to prevail.

At the highest level, this cordial, business-is-business atmosphere is found in the close rapport between the two Prime Ministers, Dr Mahathir of Malaysia, and Mr Lee Kuan Yew of Singapore.

At the corporate level, perhaps the best illustration is what is happening in Promet. Here the business and technological skills of a young Singaporean have fused with the dynamism and political contacts of a young Malay to create what is one of South East Asia's most promising conglomerates.

A venture of this kind would have been unthinkable five years ago.

Before the 1980 takeover, Promet was known as Boris Southeast Asia, and before that Gammon. It was controlled by the Peninsular and Oriental Navigation Company of the UK.

Between 1976 and 1980, the concern lost more than 40m ringgit (U.S.\$17m), and in October 1980, P & O sold its 54.7m shares, representing 80 per cent of Boris, to Mr Chang at 45 cents each, or a total of 24.6m ringgit (U.S.\$10.6m).

Dato Ibrahim, a close friend of Mr Chang during student days in London, was brought in. The Malaysian became chairman and the Singaporean the managing director. Mr Chang injected his own marine fabrication business, and renamed the company "Promet".

Both men have ambitious plans, and have meant to carry them through amicably.

One of the first things they did was to tackle the main prob-

Mr Brian Chang is 38 and Dato Ibrahim is 39—but their combined wealth is probably in excess of 700m ringgit (US\$300m), and they have made this money in the past 10 years. Mr Chang studied electrical engineering at the University of London in the mid-sixties, where he met Dato Ibrahim, who was reading law.

On returning to Singapore, Mr Chang worked as a design engineer with the marine division of Jardine Matheson, the Hong Kong-based trading house, later moving on to Far East Livingstone Shipbuilding, of Singapore. He returned to the Jardine's division as a partner, and later bought the business itself.

His big chance came in 1971 when he won an oil rig order from an American company. It was delivered well ahead of schedule.

Since then, he has turned his company into one of Singapore's largest rig builders. Engineering talent apart, Mr Chang is commercially alert, spending much time travelling around the world, negotiating contracts and scouting for business opportunities, particularly in the oil-related field.

Dato Ibrahim set up his law office in Kuantan in 1970 with a 9,000 ringgit loan from a government agency. Within two years, it was the biggest in Pahang State.

He invested in property, went into construction, and made strong gains in the share market in 1973. From



Mr Brian Chang

1976 to 1979 he was chairman of Genting, the Malaysian casino and hotel group.

Because of his strong political contacts, Promet, unlike many other companies, is at ease in entering into joint ventures with government agencies. Close contacts with the Malaysian political leadership is vital for business success these days, because of the increasing government involvement in the corporate sector.

Mr Brian Chang is based in Singapore and Dato Ibrahim in Kuala Lumpur. They contact each other daily by telephone, and meet two or three times a month.

Mr Chang holds 43 per cent and Dato Ibrahim 29 per cent of the 207m shares in Promet.

develop it into "an emporium" supplying equipment to the oil industry in the Americas and Europe.

For the Asian market, Promet has acquired 500 acres in Johore State, in Malaysia, fronting Singapore, for another yard. It is to spend 250m ringgit (US\$110m) on the project, which will employ 4,000 workers.

"We have only 71 acres in Singapore, and our yards are too congested," Dato Ibrahim says. The Singapore yards employ 2,000 workers.

Promet has also taken a significant step towards becoming an oil operator. There are good chances of its getting a concession area for exploration from the Indonesian authorities. It also hopes to get an exploration concession in East Malaysia.

On the construction side, the group has more than 300m ringgit worth of jobs on hand, including a 35-storey office block in Kuala Lumpur for its headquarters, and a 100m ringgit hotel and office block in Kuching, the capital of Sarawak.

Malaysian authorities have given the go-ahead for it to build an oil town in Trengganu, covering 600 to 800 acres, where foreign oil men can live and enjoy a lifestyle without friction with the conservative Moslem population. The cost of the project is set at 18m ringgit (US\$430m).

Dato Ibrahim says that the aggressive development Promet has followed in the past 18 months would not have been possible had it not been for his close contacts with Dr Mahathir, the Prime Minister.

Last July, he donated 1m of his own Promet shares to the Prime Minister's UMNO party for its building fund. But he maintains Dr Mahathir has not favoured Promet because of personal links. "The Prime Minister is a good Moslem and nationalist. He makes his judgment on a proposal on the benefits it brings to the nation."

"We are a young team, with a lot of big ideas. And we have shown we can get things moving. I think he is impressed by that," Dato Ibrahim says.

Certainly, Promet is moving fast. It rose from 71st to 11th position among the top 100 companies on the Malaysian and Singapore stock exchanges last year. It is helped by the expanding economies of the members of the Association of South East Nations.

Wong Sulong

lems of the old company—the loss-making granite works on Karimun Island in Indonesia.

The entire management on the island was fired. Production, which was 60,000 tonnes a month, rose to 120,000 within three months. Output now is 200,000 tonnes a month, and the target is 250,000 tonnes by the year's end, making it the second largest quarry in Asia.

The time taken in supplying customers was considerably reduced by better use of barges and tugboats.

Last year, Karimun contributed 1m ringgit to Promet's profits. The Promet group pre-tax profit for 1981 was 42m ringgit (U.S.\$18m) on a turnover of 370m ringgit (U.S.\$160m).

Today, the group consists of over 60 companies—in Malaysia,

Singapore, Hong Kong, U.S. and Panama. These deal in two main lines—marine fabrication, particularly for the oil industry, and construction and property development.

Its marine yards in Singapore have work until the end of next year.

"Although our yards are building rigs most of the time, they can take on more sophisticated work, like jackets, modules, supply vessels and pipe-laying, which are in good demand. We are not worried," Dato Ibrahim says.

To prove this point, the group has bought a 50 per cent stake in Baker's Port, of the U.S., which owns 3,000 acres of industrial land on the Gulf of Texas. Promet and its partner, Baker Marine, intend to

All these securities having been sold, this announcement appears as a matter of record only.



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NEW ISSUE

28th April, 1982



Kingdom of Denmark

Japanese Yen 15,000,000,000

8½ per cent. Bonds due 1st May, 1992

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NEW ISSUE All these securities having been sold, this announcement appears as a matter of record only. April, 1982

Companies and Markets

NEW YORK

Table of stock prices for various companies in New York, including ACF Industries, AMP, and others.

Stock

Table of stock prices for various companies, including Columbia Gas, Combined Int'l, and others.

Stock

Table of stock prices for various companies, including St. At. Pac. Tes., St. Beins Pac., and others.

Stock

Table of stock prices for various companies, including MCM, Metromedia, and others.

Stock

Table of stock prices for various companies, including Schiltz Brew, Schlumberger, and others.

Stock

Table of stock prices for various companies, including Simplify Part., Skyline, and others.

Stock

Table of stock prices for various companies, including St. Of Oil, St. Of Oil, and others.

Stock

Table of stock prices for various companies, including Tandy, Telebank, and others.

Stock

Table of stock prices for various companies, including Telenor, Telenor, and others.

Stock

Table of stock prices for various companies, including Telenor, Telenor, and others.

Stock

Table of stock prices for various companies, including Telenor, Telenor, and others.

Fresh early Wall St decline

SOME heavily-traded issues advanced on Wall Street yesterday morning, but in general the market pointed lower as investors wrestled with the problem of President Reagan's inability to work out a compromise with Congress on his Federal Budget plans.

The Dow Jones Industrial Average was 37 1/2 lower at 948.93 at 1 pm, while the NYSE All Common Index shed 33 cents to 357.22.

With the favourable effects of Wednesday's news of West Germany's record trade surplus for March counterbalanced by worries over the Falkland Islands crisis, Dow Jones ended on a mixed note yesterday.

Winnipeg, a strong performer on the most active list, rose a point to 56 1/2. Woodworth, also heavily traded, gained 1 1/2 to 51 1/2.

STERLING Drug, however, fell 2 1/2 to 22 1/2 on more than 1 million shares traded. Consumer activist Ralph Nader's health research group charged that Key's Syndrome in children is linked to the use of aspirin.

Among other heavily-traded issues, General Motors lost 1 1/2 to 29 1/2. American Telephone 1 to 54 1/2. THE AMERICAN SE Market Value Index slipped 0.69 to 272.14 at 1 pm on volume of 3.67m shares.

Champion Home Builders, the most active stock, was unchanged at \$27 on nearly 100,000 shares.

Markets continued their recent downward slide in moderate early dealings, leaving the Toronto Composite Index 10 1/2 weaker at 1,555.81 at midday.

Closing prices for North America were not available for this edition.

After surrendering a little more of its recent good rise, the market picked up late in the session on meeting selective news.

The Hang Seng index lost another six points initially before improving to record a 1,023.08. Trading was reasonably active, turnover amounting to HK\$282.5m.

Chief dealers at several major banks believed that trading would proceed as normal on the Zurich Exchange today, but investors who took a controlling.

Gold shares were easier with the Bullion price but otherwise the market was little changed in very slow trading.

Heavyweight gold producers Western Holdings and President Steyn shed 12 1/2 cents apiece to R43.75 and R28.50 respectively.

In Diamonds, De Beers showed no reaction to chairman's review, holding unchanged at R50.00.

The market was closed yesterday for the Emperor's Birthday holiday.

Notes: Prices on this page are quoted on the individual exchanges and are best bid prices. A difference of 1/2 cent is shown as 0.50.

Indices

Table of indices for New York, including Dow Jones, S&P 500, and others.

Table of indices for Standard and Poors, including Industrials, Composites, and others.

Table of indices for NY, S.E. All Common, including High, Low, and others.

Table of indices for Montreal, including Industrials, Composites, and others.

Table of indices for Toronto, including Industrials, Composites, and others.

NEW YORK

Table of indices for Australia, including All Ord. (1/1982), All Ind. & Min. (1/1982), and others.

Table of indices for Austria, including DAX General (1/1982), DAX General (1/1982), and others.

Table of indices for Belgium, including Belg. Ind. (1/1982), Belg. Ind. (1/1982), and others.

Table of indices for Canada, including S&P 500, S&P 500, and others.

Table of indices for Denmark, including Copenhagen SE (1/1982), Copenhagen SE (1/1982), and others.

NEW YORK

Table of indices for France, including CAC General (1/1982), CAC General (1/1982), and others.

Table of indices for Germany, including DAX General (1/1982), DAX General (1/1982), and others.

Table of indices for Hong Kong, including Hang Seng Bank (1/1982), Hang Seng Bank (1/1982), and others.

Table of indices for Italy, including S&P 500, S&P 500, and others.

Table of indices for Japan, including Dow Jones, Dow Jones, and others.

NEW YORK

Table of indices for Norway, including Oslo SE (1/1982), Oslo SE (1/1982), and others.

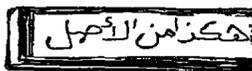
Table of indices for Singapore, including Straits Times (1982), Straits Times (1982), and others.

Table of indices for South Africa, including All Share (1982), All Share (1982), and others.

Table of indices for Sweden, including Stockholm (1982), Stockholm (1982), and others.

Table of indices for Switzerland, including Swiss Index (1982), Swiss Index (1982), and others.

Notes: Prices on this page are quoted on the individual exchanges and are best bid prices. A difference of 1/2 cent is shown as 0.50.



EQUITIES

Table of recent equity issues with columns for issue price, amount, and stock details.

FIXED INTEREST STOCKS

Table of fixed interest stocks with columns for issue price, amount, and stock details.

"RIGHTS" OFFERS

Table of rights offers with columns for issue price, amount, and stock details.

OPTIONS

Text discussing options, including details on First Last Settling and various market movements.

RISES AND FALLS YESTERDAY

Table showing rises and falls in various markets like British Funds, Foreign Bonds, and Shares.

ACTIVE STOCKS

Table of active stocks with columns for stock name, closing price, and daily change.

WEDNESDAY'S ACTIVE STOCKS

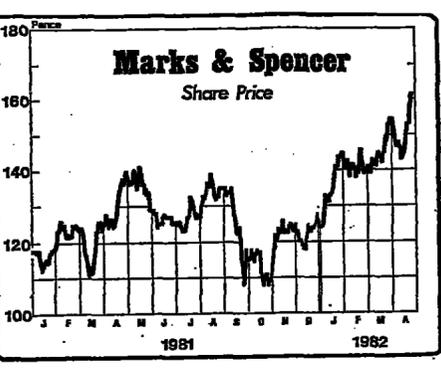
Table of Wednesday's active stocks with columns for stock name, closing price, and daily change.

LONDON STOCK EXCHANGE

Markets rise afresh despite prevailing uncertainty Share index gains 6.7 to 582.0-ICI disappoints

Account Dealing Dates... First Declara- Last Account... Disappointing first-quarter figures from ICI...

strongly to favourable comment on the preliminary figures with a rise of 24 at 482p and Grindlays moved sharply higher...



Turner & Newall good... Miscellaneous... Industrial buildings generally shrugged aside ICI's disappointing quarterly statement...

Support was noted for leading Textiles with Tootal, annual results scheduled for Tuesday, adding 24 to a 1982 peak of 421p.

FINANCIAL TIMES STOCK INDICES table with columns for date and various index values.

day gain of 11 at 60p... Buildings displayed several firm features. Press comment on the preliminary results prompted demand for Blue Circle which put on 26 to 49p...

Plessey feature

Buyers continued to show an interest in Plessey following recent Press comment and the shares closed a further 10 up and 20 better on the week so far at a 1982 peak of 397p.

Carless drilling report

The Oil sector featured the Humby Grove - participants, which moved sharply higher following the favourable No. 2 well drilling report.

HIGHS AND LOWS S.E. ACTIVITY table with columns for date, high, low, and activity.

ICI dropped to 306p on first-quarter profit below market estimates before rallying on bear-closing to settle only 6p cheaper on balance at 318p. Late support left Fisons 3 dearer at 332p, while Coates Brothers 'A' put on 4 to a 1982 peak of 53p.

Depressed recently by adverse Press comment, Properties may renew support and closed with useful gains in places. Land Securities improved 8 to 386p and MEPC 3 to 186p.

WORLD VALUE OF THE DOLLAR

Bank of America NT & SA, Economics Department, London

The table below gives the rates of exchange for the U.S. dollar against various currencies as of 11.00 a.m. on April 29, 1982.

Large table showing exchange rates for various countries and currencies, including columns for country, currency, and value of dollar.

NEW HIGHS AND LOWS FOR 1982

The following quotations in the Share Information Service yesterday obtained new Highs and Lows for 1982.

Table of new highs and lows for 1982, listing various stocks and their prices.

FT-ACTUARIES SHARE INDICES

These indices are the joint compilation of the Financial Times, the Institute of Actuaries and the Faculty of Actuaries

Table of FT-Actuaries Share Indices with columns for equity groups, fixed interest, and average gross redemption yields.

INDUSTRY AND THE NORTH SEA

Where Britain has lost out to foreign contractors

By Hazel Duffy

THE NORTH Sea might have been the showplace for British industry as well as the education, at least temporarily, of the British economy. In investment terms, the petroleum and natural gas sectors have averaged between a third and a half of total UK investment in manufacturing industry over the past few years. While other areas of industry have declined with depressing certainty over the last decade, the North Sea has presented a huge market opportunity.

But the discovery of oil and gas in Britain's backyard has not been the technology spur for British industry that it might have been. That, at least, is the theme of an interim report from a study of the North Sea and British industry being carried out by Mr John Surrey, head of the energy group at the Science Policy Research Unit at Sussex University.

On the basis of the work done by the team so far, the study concludes that with the partial exception of underwater work, "the key offshore activities and architect-engineering remain dominated by foreign contractors." Furthermore, these contractors are not all U.S.-based, as might be expected given the preponderance of U.S. oil companies in the North Sea, but "a number of Continental companies have also established competitive capabilities in various offshore activities."

Mr John d'Ancona, director general of the Offshore Supplies Office (OSO), the government body directed to ensure that British industry gets a reasonable share of North Sea work, does not disagree with this conclusion. But he thinks that time is still on the side of British industry. "Given the short time that the North Sea has been operating, it would be very surprising if the picture would have been different." But

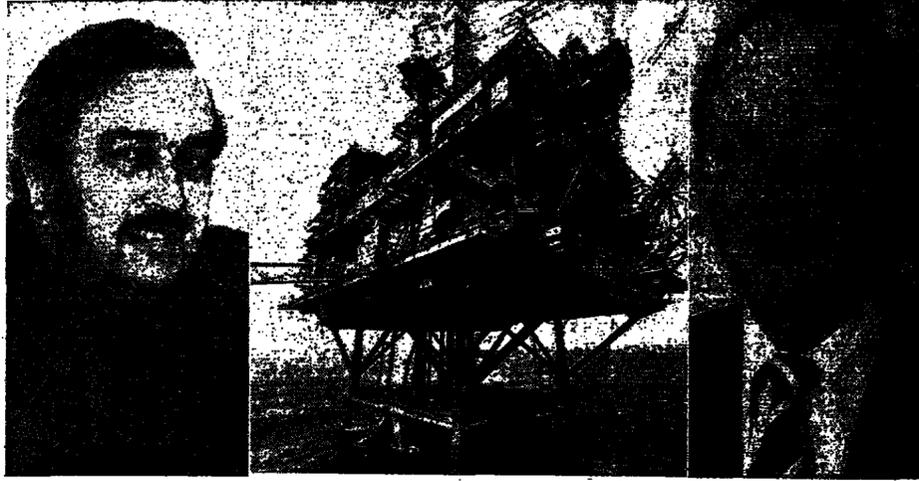
he agrees that unless this capability has emerged by the end of the 1980s, with at least one major British-based contractor joining the U.S.-dominated league of international offshore contractors, it will almost certainly be too late.

Government policy towards the North Sea shows that rapid exploitation of North Sea oil and gas has been the prime consideration. Dr Michael Jenkin, in his book on government intervention in the North Sea industry, says that by late 1973, following the Opec price rises, the acceleration in North Sea development timetables took on a new urgency, "with the result that offshore supplies policy began to favour rapid oil field exploitation over the ordered development of a domestic offshore industrial capability."

Radical recommendations on the course of action that would be necessary to foster specialist offshore capabilities were contained in a consultants' report (the IMEG report) commissioned by the Heath Government. Instead, a much less powerful body in the form of the OSO was set up in 1973, charged with administering the "full and fair opportunity" policy which required that the oil companies give British industry the chance to compete.

The policy was essentially a short-term, individual contract approach, which avoided the issues of intervention and infant industry support that would have been necessary if government had set out to establish an internationally competitive industry in the longer term.

In the context of the proportion of work-load secured by British industry, the OSO's brief is being fulfilled. The UK share of offshore contracts



OSO's John d'Ancona (left); works on a prayer; Ruston's Kelvin Bray (right): not a colossal market

rose from 40 per cent in value terms in 1974 to 71 per cent in 1980, and was as high as 79 per cent in 1973. But this growing share has been due to the big increase in British industry's share of development contracts, and the growth of development within the total value of orders placed. Quite a large part of this work consists of fabrication, which has provided a valuable work-load for the process plant industry. But it is unlikely to be competitive in waters other than the North Sea.

The UK share of exploration, however, has shown no sustained increase of the 33 per cent obtained in 1974, while the

share of support services, although considerably higher, has shown no significant increase since 1975. On the basis of the limited data available, Sussex University's John Surrey says he comes to the "inescapable" conclusion that the UK share is "heavily concentrated on fabrication, manufacturing equipment, and less-specialised support services, i.e. activities which were within the pre-existing capabilities of British industry."

An example of an equipment company which was making a product highly suited to offshore installations is Ruston Gas Turbines. Although Britain had no prior experience of off-

shore development before the North Sea, Ruston had already established a worldwide reputation with its gas turbines which are used for a range of tasks including gas compression and injection, pumping, and the generation of power on platforms.

"The North Sea has not been a colossal market for us," says Ruston's managing director, Mr Kelvin Bray. "Nevertheless, it has been useful insofar as the physically demanding conditions necessitated adaptation of the product which has been valuable elsewhere and also because the existence of a home market is obviously a help to sales. But we still rely for the

bulk of our business on exports."

Given that the equipment was frequently available in the UK, the Surrey report says it would have been odd if some at least of the orders had not been placed in this country. But

what of the new technology in specialist activities such as exploration drilling, rig construction, platform installation and pipelaying, and support vessels? The report finds that this has largely become the province of certain European yards such as Aker, Trosvik and Franaes in Norway, Gota-varken in Sweden, Ragna Repola in Finland, and CFEM in France, against strong com-

petition from Japan and South Korea.

In platform installation, however, of Holland and Microsoft, but not with the U.S. pipelaying and in pipelaying, "the British and Japanese are high on the short list of countries which do not have the advantage of the North Sea on their doorsteps have nevertheless developed these industries, in areas which are highly competitive in the world market. It is a question of the part of the companies and the close relationship — stimulated sometimes by government — between customer and supplier, in countries such as France and Italy."

The Norwegians formed Statoil, the State oil company, which operates similar to the British National Oil Corporation, but additionally has specific responsibilities in connection with procurement policy. The outcome of this careful fostering by government, however, has been the creation of an industry which is internationally uncompetitive, according to some critics.

By contrast, British policy has been confined largely to the limited powers of the OSO. John Surrey says that if government had meant the OSO to be an instrument of industrial policy, it would not have placed it under the Department of Energy. John d'Ancona admits it "works on a prayer." It has, however, proved effective in many areas. Vickers, for instance, describes the OSO as "very helpful" in guiding the company when it was tendering for the important part that it won on the tension leg platform being built for Conoco.

The tension leg platform is a highly innovative approach to recovering oil from the deep waters of the northern North Sea which the designers hope

will be effective in deeper water in other parts of the world. There was disappointment, however, that the overall contract went to the American, Bechtel, and Brown and Root, and not John Brown Engineers and Constructors (previously CJB).

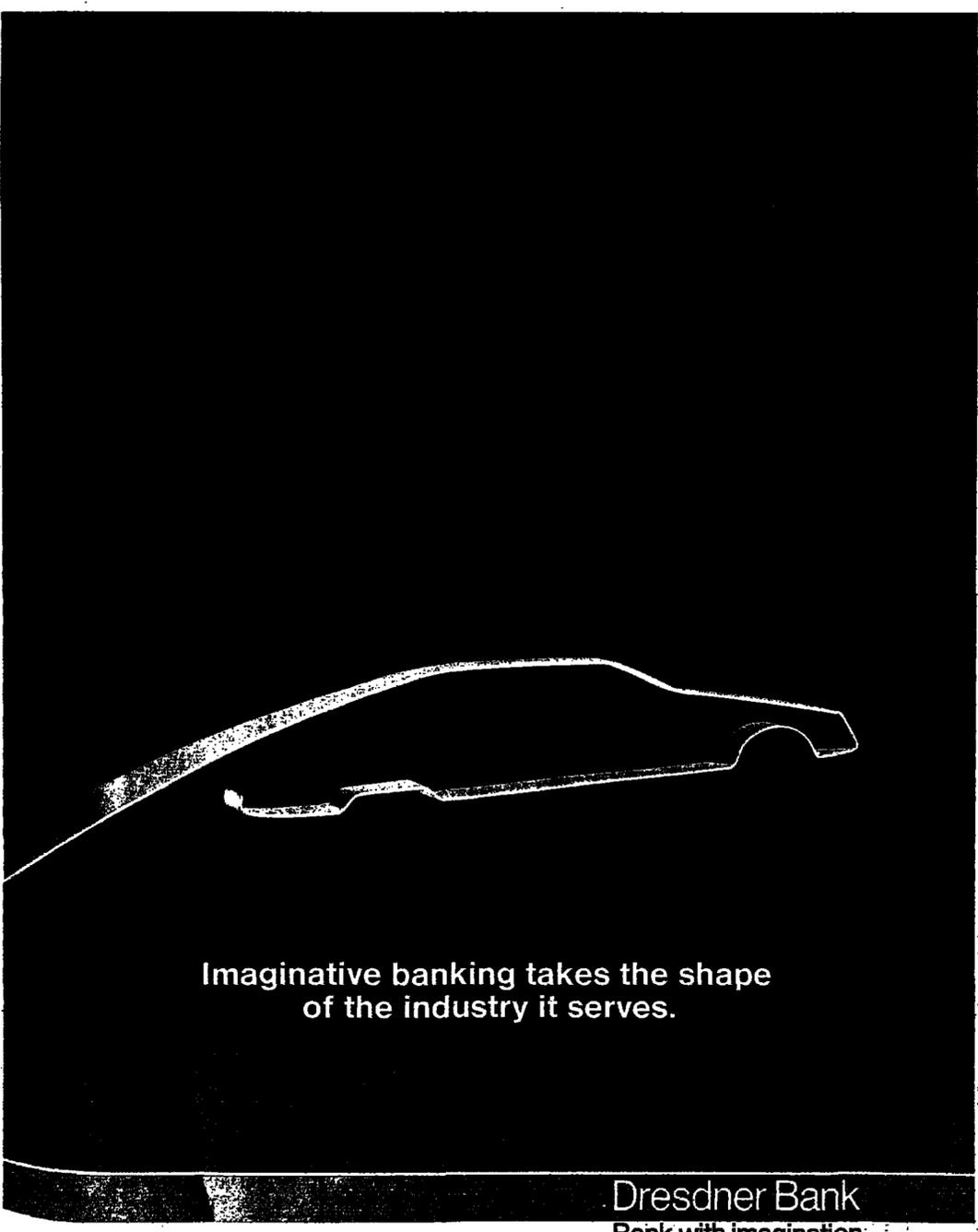
In spite of the strength of the UK-based oil companies — BP, Shell UK, and ASOC — British governments have not sought to lean upon them to choose British. However, Mr John Haisman, chairman and chief executive Shell UK, told a forum last year that British industry in the North Sea is "generally doing well."

John d'Ancona believes that the solution to the problem of ensuring that British companies get a larger slice of the action in the North Sea is to make the oil companies agree to explicit on a commercial basis the research and development which is being conducted in British universities and companies, as a condition of their being awarded exploration licences in the next round.

Others, however, are less convinced that R and D, which tends to be fairly freely exchanged in the oil business, unlike the tight licensing procedures that exist between chemical companies and contractors, for instance, is the key to British companies winning their way into the North Sea.

It is agreed, however, that British companies must gain the maximum experience in the North Sea over the next five years. Only in this way will they gain the international status that they will need to win orders for other offshore developments around the world.

Offshore Supplies Contracting British Industrial Achievements in the North Sea and the role of Government policy. Interim report by John Surrey, University of Sussex. 1980. Industry and the North Sea. Michael Jenkin, Macmillan Press, £3.



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(National Hydrocarbons Authority)
6 1/2% Sinking Fund Debentures due June 1, 1987

NOTICE IS HEREBY GIVEN that, pursuant to the provisions of the Sinking Fund for the Debentures of the above-described issue, Morgan Guaranty Trust Company of New York, as Fiscal Agent, has selected by lot for redemption on June 1, 1982 at the principal amount thereof \$550,000 principal amount of said Debentures, as follows:

Outstanding Debentures of U.S. \$1,000 Each of Prefix "R" Bearing Serial Numbers Ending in the Following Two Digits:

52	53	54	55
259 289 359 429 499 569 639 709 779 849 919 989	139 169 239 309 379 449 519 589 659 729 799 869 939	109 179 249 319 389 459 529 599 669 739 809 879 949	149 219 289 359 429 499 569 639 709 779 849 919 989

On June 1, 1982, there will become due and payable upon each Debenture the principal amount thereof, in such coin or currency of the United States of America as on said date is legal tender for the payment thereof of public and private debts, at the option of the holder, either (a) at the corporate trust office of Morgan Guaranty Trust Company of New York, 13th Floor, 30 West Broadway, New York, N.Y. 10015, or (b) subject to any laws and regulations applicable thereto with respect to the payment, currency of payment or otherwise in the country of any of the following offices, at the principal office of Banca Nazionale del Lavoro in Rome or the principal office of Banca Commerciale Italiana in Milan or the main offices of Morgan Guaranty Trust Company of New York in London, Brussels, Paris or Frankfurt or the main office of Algemeene Bank Nederland N.V. in Amsterdam or the main office of Kredietbank S.A. Luxembourgeoise in Luxembourg-Ville.

Debentures surrendered for redemption should have attached all unexpired coupons appurtenant thereto. Coupons due June 1, 1982, should be detached and collected in the usual manner.

From and after June 1, 1982, interest shall cease to accrue on the Debentures herein designated for redemption.

ENTE NAZIONALE IDROCARBURI
By: MORGAN GUARANTY TRUST COMPANY
OF NEW YORK, Fiscal Agent

April 30, 1982

NOTICE

The following Debentures previously called for redemption have not as yet been presented for payment:

DEBENTURES OF U.S. \$1,000 EACH							
11229	5183	8228	10388	14528	11578	16228	24803
5181	5154	8230	11322	11335	11264	16222	24763

NOTICE OF REDEMPTION To the Holders of ENTE NAZIONALE IDROCARBURI E.N.I.

(National Hydrocarbons Authority)
6 1/2% Sinking Fund Debentures due June 1, 1988

NOTICE IS HEREBY GIVEN that, pursuant to the provisions of the Sinking Fund for the Debentures of the above-described issue, Morgan Guaranty Trust Company of New York, as Fiscal Agent, has selected by lot for redemption on June 1, 1982 at the principal amount thereof \$715,000 principal amount of said Debentures, as follows:

Outstanding Debentures of U.S. \$1,000 Each of Prefix "R" Bearing Serial Numbers Ending in the Following Two Digits:

23	43	53	63
139 169 239 309 379 449 519 589 659 729 799 869 939	109 179 249 319 389 459 529 599 669 739 809 879 949	149 219 289 359 429 499 569 639 709 779 849 919 989	139 169 239 309 379 449 519 589 659 729 799 869 939

On June 1, 1982, there will become due and payable upon each Debenture the principal amount thereof, in such coin or currency of the United States of America as on said date is legal tender for the payment thereof of public and private debts, at the option of the holder, either (a) at the corporate trust office of Morgan Guaranty Trust Company of New York, 13th Floor, 30 West Broadway, New York, N.Y. 10015, or (b) subject to any laws and regulations applicable thereto with respect to the payment, currency of payment or otherwise in the country of any of the following offices, at the principal office of Banca Nazionale del Lavoro in Rome or the principal office of Banca Commerciale Italiana in Milan or the main offices of Morgan Guaranty Trust Company of New York in London, Brussels, Paris or Frankfurt or the main office of Algemeene Bank Nederland N.V. in Amsterdam or the main office of Kredietbank S.A. Luxembourgeoise in Luxembourg-Ville.

Debentures surrendered for redemption should have attached all unexpired coupons appurtenant thereto. Coupons due June 1, 1982, should be detached and collected in the usual manner.

From and after June 1, 1982, interest shall cease to accrue on the Debentures herein designated for redemption.

ENTE NAZIONALE IDROCARBURI
By: MORGAN GUARANTY TRUST COMPANY
OF NEW YORK, Fiscal Agent

April 29, 1982

NOTICE

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DEBENTURE OF U.S. \$1,000							
11229	5183	8228	10388	14528	11578	16228	24803
5181	5154	8230	11322	11335	11264	16222	24763

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FINANCIAL TIMES SURVEY

Friday April 30 1982

INTERNATIONAL OFFSHORE TECHNOLOGY

Economic and political uncertainties are troubling the international offshore oil industry which, in turn, is faced with an over-riding challenge to exploit its discoveries more efficiently than in the past.

Operators face a daunting task

OFFSHORE OIL operators and their suppliers around the world are finding themselves caught in the backwash of their own success.

Their rapid increase in production in recent years has coincided with an overall drop in energy demand which, in turn, has led to depressed prices. Yet, to justify new offshore projects high prices are needed by the operators. As a result, they are faced with even greater technological challenges than in the past.

Oil companies will have to devise more efficient ways of exploiting smaller, harder-to-find fields in deeper, more hostile waters at a time of stable or even falling oil prices.

It is a daunting prospect and one which will almost certainly dominate the conversation of oilmen as they pack the Offshore Technology Conference and Exhibition in Houston, Texas, next week.

"We are back to where we were in 1972, when money really mattered," commented a senior executive of a leading offshore oil company. "We have gone through the cycle of the past eight years or so when it appeared that money was no object."

And as if to reinforce the point, two other leading pro-

ducers of offshore oil — Shell and Exxon — announced last week that they were shelving their \$600m Tern Field development project in the North Sea.

The reasons given were the costly and technically difficult production methods needed to exploit the complex reservoir, an "onerous" offshore oil tax structure, and an uncertain world oil price outlook.

Gone are the days of the late-1970s when the oil industry was forecasting prices would continue to rise by around 2 to 3 per cent annually, in real terms. With so much production capacity now shut in—around 15bn barrels a day within the 13 members of the Organisation of Petroleum Exporting Countries alone—few are predicting any real price growth at all over the next few years.

Most probably there will be a decline—a view taken by Dr Herman Franssen, head of the energy economics division within the International Energy Agency, the oil-consuming West's mirror organisation to Opec.

By the mid-1980s, he argues, oil demand within the developed nations would still be a long way short of consumption levels in 1979 and Opec would still have to curtail some of its production.

But Dr Franssen sounded a note of caution, one conditioned by the experience of two energy crises in the 1970s: "The time when prices could rise again in real terms is towards the end of the 1980s, when there will have been a number of years of low prices. The oil market could become tight enough so that even a minor interruption in oil supplies could play havoc with the market."

The new, uncertain climate in the international oil market arises from radical changes in supply and demand balances. The big price increases of the 1970s at least aggravated, and may have caused, worldwide

economic recession which has lowered oil demand. High energy prices have also prompted a concerted drive towards conservation and fuel-use efficiency. At the same time, new suppliers of oil, many of them operating offshore, have competed for sales.

In 1971, the top ten list of oil producers comprised countries in Opec, North America and the Soviet Union. Last year, the list had a different complexion. The new names were Mexico, China, the UK and Indonesia—all countries either heavily involved in offshore oil production or, as in the case of China, with considerable offshore producing potential.

Estimates

Latest industry estimates indicate that offshore oil fields account for about a quarter of the world's proven and probable oil reserves (around 870bn barrels) and almost one-fifth of total production. On the basis that the most obvious, easiest-to-exploit landward fields were found and exploited first, the relative importance of the offshore industry seems bound to increase.

Offshore production has required the development of an almost entirely new, high technology industry. Precise data is hard to come by, but it seems that investment in offshore exploration and development in non-Communist countries is now running at a level of \$15bn to \$20bn a year — equivalent to

one-third of the West's oil and gas industry's annual investment on exploration and production.

A report published six months ago by the energy economics division of the Chase Manhattan Bank concluded that these figures could rise dramatically. This showed that non-Communist investment in petroleum exploration and development could rise to about \$360bn (£205bn) in 1990.

This would indicate a cumulative investment, between 1980 and 1990 of some \$2,000bn and an annual growth rate of 18.4 per cent.

Yet whether this growth will be achieved, particularly in high cost offshore fields, must be doubtful.

In the UK sector of the North Sea, Tern could become the first of a series of fields to be shelved for the time being. During the past year the contract prices of North Sea crude oil have fallen from \$39.25 to \$31 a barrel. The estimated development and producing costs of some of the deep-water, more challenging discoveries have risen to over \$20 a barrel.

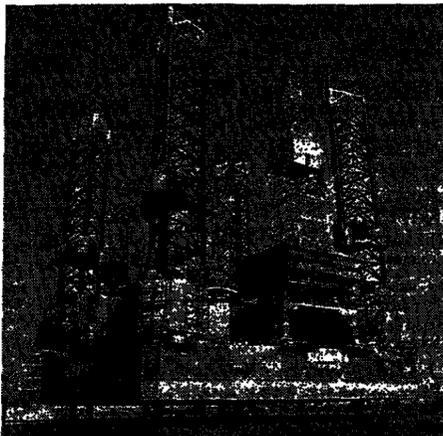
Mr Bill Thomson, group managing director of the Royal Dutch/Shell Group, pointed out in West Germany a month ago that the expenditure behind some of the early North Sea oil fields worked out at around

\$5,000-\$7,000 (in 1981 money) for every barrel a day produced at peak levels. (For instance, a 100,000 barrel-a-day field might cost \$500-\$700m to develop.) Comparable figures for fields now being looked at could be \$15,000-\$20,000 per daily barrel. As a case in point, British Petroleum's important Magnus Field—the most northerly commercial discovery in the North Sea—is costing \$19,000 per daily barrel to exploit, 187 per cent more than the development cost of the company's earlier Forties Field.

Shell believes there are sufficient oil reserves in the UK sector of the North Sea to support the development of some 70 fields over the next two decades. Such a programme could involve the expenditure of \$50bn-\$60bn at today's buying power by the end of the decade. Oil executives now doubt however whether financial conditions—oil prices and taxation—will be sufficiently attractive to support all of this work.

Apart from the UK—where platform builders and their suppliers are planning widespread redundancies in the light of falling orders—warning signs have also appeared in other major offshore areas.

Stock brokers Merrill Lynch, Pierce, Fenner and Smith, have reported significant falls in the



Neddrill 4, the new large four-legged cantilevered jack-up rig, in Rotterdam after an 11,000-mile dry tow from Osaka. Neddrill 4 is being fitted out prior to operating in the North Sea.

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face of worldwide platform construction and pipeline operations in recent months. The number of spare drilling rigs, admittedly tiny compared with units in operation, were the highest since April 1980.

Rig operators are now becoming extremely nervous given the slow-down in the growth of drilling activity and the arrival during 1982 of scores of new units. It is expected that as a result of orders placed with ship builders, there could be a 40 per cent increase in the mobile rig fleet by the end of next year.

The uncertainties plaguing the offshore supplies industry stem not only from strict economic factors. Politics have also come to the fore.

Taxation

In the UK, oil operators who had expected a Conservative Government to be more sympathetic to their cause, are grumbling about the toughened tax regime introduced by a Tory Chancellor.

And in Canada, another of the world's most promising offshore oil areas—especially in the Atlantic—operators have become disillusioned by political squabbles between the provinces and the federal government and by Ottawa's national energy policies designed to bring all of the country's natural resources under Canadian control by the end of the decade. Industry estimates that the waters of Newfoundland and Nova Scotia could contain 10bn to 26bn barrels of oil and gas remain unchanged, but the prevailing mood of optimism and excitement has disappeared.

Significantly, the offshore industry's interest is now concentrated on prospective areas which, in previous years, would have been regarded as far more politically suspect, and potentially more unstable, than the

UK or Canada; areas like West Africa, China, Indonesia, Malaysia and the Gulf of Suez. These are now rated among the hot spots for future exploration. Wherever it ventures, the offshore oil industry will be faced with the over-riding challenge of exploiting their discoveries more efficiently than hitherto.

In this respect, the North Sea is acting as a test bed for a whole armoury of new producing equipment. Fields are being exploited with:

- The world's heaviest concrete platforms.
- Some of the largest, most complex steel platforms.
- The first tension-legged platform, a novel concept suitable for water too deep for conventional fixed production structures.
- The first major underwater production system; a large remote-controlled unit that could eventually be used in very deep water.
- In the future, operators could well be using moveable production-cum-storage vessels, similar to tankers equipped with their own oil-seeking proboscis. Much more production equipment will be placed on the seabed, serviced by a fleet of robot vehicles. (Equipment manufacturers cannot wait for the day when small underwater power packs will do away with the need for inhibiting umbilical power cables).
- Before many years have passed, pumps lowered to the bottom of production wells may be assisting in the recovery of vast quantities of difficult-to-produce oil west of the Shetland Islands.

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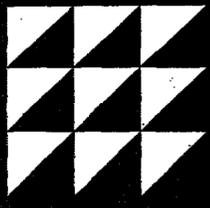
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INTERNATIONAL OFFSHORE TECHNOLOGY II

Scientists are working on new ways to unlock the secrets beneath the sea bed. Seismic holography may soon help to build up a picture of geological structures, as ARTHUR CONWAY reports.

EXPLORATION and prospecting on the sea bed poses many problems, and one expert recently described space travel as less difficult than placing a man on the ocean floor at depths of just a few hundred metres.

That observation, made by John Derrington, a director of Sir Robert McAlpine and Sons and vice-president of the Institution of Civil Engineers, at the Oceanology International Conference at Brighton, does not overstate the general problems.

However, there has been important advances in particular areas of exploration that are helping to overcome some of the difficulties.

As has been remarked by P. Kessler, Shell's Head of Economics and Sector Plan-

ning concerned with co-ordinating exploration and production, very few areas, even offshore, are totally unknown geologically.

So much scientific surveying and commercial prospecting has already been done that there is usually something in the data bank for an explorer to go on when a geological hunch, a politico-economic lurch, or some other stimulus sparks off his interest in a particular area.

If his meticulous desk studies justify field work there may follow an on-the-spot hunt for comprehensive information on the structure of the sedimentary layers that may be trapping oil or natural gas. This is where seismography, earth-tremor measurement, the geologist's long-estab-

lished and still main means to knowledge of our planet's interior, can be used.

Seismographic techniques originated in the scientific investigation of earthquakes. The principles were first applied to oil prospecting on land in the U.S. in 1921. Undersea application came later. In 1946 seismic surveys were essayed off the shores of Louisiana.

Computer systems

The seismic surveyor of sea-bottoms does not wait for earthquakes, but creates his own earth tremors. He may do this by setting off controlled explosions, of compressed air or other gas, to send waves from a ship through the earth.

These waves are reflected and refracted at the interfaces between different types of sedimentary rock. Thus modified waves find their way to detectors, "geophones," possibly towed by the surveying ship. Data transmitted to the ship is recorded for subsequent processing.

Seismic data processing is the vital follow-on, and information theory and the ubiquitous computer have a growing share in the important business of tracking down hydrocarbon deposits.

Dr Jack Birks who, at the end of last March retired as managing director of BP Petroleum, has praised the geophysical industry for its data gathering and computing advances. In his keynote speech at the

Oceanology International Conference, Dr Birks said that worthwhile reserves would be found offshore only by intensive search for the remaining geological traps, and the successful exploitation of those traps demanded more precise and detailed geophysical analysis and sub-surface mapping. "The geophysical industry continues to respond to this challenge," he added.

He had some remarkable progress to report. He said that the response to each detonation of a surveying ship's air-gun was nowadays recorded on 96 or more data channels, which was four times the number of only five years ago. There was also a corresponding expansion in

the quantity of data acquired from each "shot." The geological structures whose secrets the seismologist tries to shake out can be very complicated. Until recently, getting a three-dimensional image of the structure involved not merely the shooting of complex and carefully controlled "grid" surveys but also the exercise of the human interpreter's imagination.

The only three-dimensional image of the geological structure that existed was the one in that interpreter's mind. However, in the past few years the necessary data processing and display techniques have been developed for presenting seismic survey data in three dimensions.

Such three-dimensional surveys were being used more every year, said Dr Birks, and they covered substantial areas. He added: "By this means we can study the detailed geology of increasingly smaller segments of undersea area."

However, explosions of data can confuse rather than illuminate—and to say "explosions" is not in indulge in hyperbole. As Dr Birks pointed out, one of today's small offshore three-dimensional surveys may produce a set of data comprising more than 2bn numbers. To benefit fully from what could otherwise become an embarrassment of riches the geophysicists need new techniques of data reduction. There is little doubt that they will emerge. In Dr Birks' own

words: "Intensive use of resources are now being devoted to the development of interpretative packages which can extract useful information from these data volumes."

The ultimate instrument for displaying and interpreting seismic data would be a holographic one. That is the view of, among other experts, Daniel H. Sullivan, who runs a geophysical data processing firm in Houston, Texas. As recently as last February, reviewing the state of the art in the journal *Sea Technology*, he reported that efforts at seismic holography had failed—so far. "But the potential is so great that it is only a matter of time before the necessary technology is developed."

Dozens of foreign companies are involved in bidding for exploration rights in China's offshore waters

China's offshore developments could cost \$20bn

ROMANTICALLY associated in the nineteenth century with graceful tea-clipper ships and cut-throat pirates, China's offshore waters today are the last great frontier—and the biggest continental shelf anywhere—on the brink of an oil-rush. Dozens of foreign oil companies, about half of them American, have so far participated in bidding for blocks for exploration in the coming years.

Peking is exploring independently in one of the most promising areas, the East China Sea, but the rest will be developed through joint ventures with foreign operators. The nuts and bolts of bids and contracts will be hammered out over the next few months.

Conditions in China may be quirky compared to elsewhere (strange rumours have reached the west of live pigs aboard the oil rigs destined for the cooking pot), but the same commercial considerations motivate the Western businessmen involved.

A dangerous corner in the growth of business confidence was turned safely in mid-April when the Chinese did not, as they had seemed to threaten, withdraw their ambassador from Washington.

If diplomatic relations had "retrogressed," as the Chinese phrase it, when the resolution

operated the 1979-81 seismic surveys in the South Yellow Sea, the Pearl River Mouth basin and in waters off Hainan Island are cautiously optimistic on the prospects, although they are closely guarding their data. But all agree that no one knows until the oil starts flowing.

Total investment to develop offshore fields is likely to be \$20bn, Mr William Lear, vice-president of First National Bank of Chicago, said recently—a figure supported by experience in the North Sea. China's foreign partners will be shelling out most of this.

Reserves

As China soldiers on towards modernisation, energy consumption is bound to take off. Oil shortages, the World Bank report on China predicted last year, could lead Peking to becoming a net oil importer by the 1990s, with the crippling foreign exchange outlay that implies.

A Chase Manhattan expert, John Emerson, recently put Chinese reserves at about 39bn barrels onshore and the same offshore (Chinese figures are much higher but may include less definitive categories of reserves). Companies who

operated the 1979-81 seismic surveys in the South Yellow Sea, the Pearl River Mouth basin and in waters off Hainan Island are cautiously optimistic on the prospects, although they are closely guarding their data. But all agree that no one knows until the oil starts flowing.

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Oil is already on stream offshore from wells sunk in the Beihai Gulf off North China, where the Japan-China Oil Development Co. and the French Elf-Aquitaine began drilling several years ago. Total-Chine, drilling since 1980, has struck oil in the Beibu (Tonkin) Gulf. Atlantic Richfield (Arco) hopes to open drilling in a nearby block in the autumn, though details of the contract agreed in the main last summer remain to be settled.

Arco shot ahead of many other western majors when a company team visited China in the early Seventies. The rest have waited in the wings for the formation of a whole new Chinese mechanism to handle

joint ventures and the offshore industry, which in turn awaited the results of the western-operated seismic surveys completed last year.

This new mechanism took off at the end of last year with the promulgation of China's new tax law for foreign companies. It followed through swiftly in February with new regulations for foreign participation in the offshore industry on the 10th, the formation of the China National Offshore Oil Corporation (CNOOC) to control the new industry on the 14th, and the first call for bids on the 16th.

CNOOC is handling the bidding process in two stages, first with a call for registration of interest, then a call for bids proper. Bidders are being asked to send representatives to Peking to obtain sample contracts and other documents.

CNOOC is taking the areas up for bids in two stages. In the first round it offered the northern part of the south Yellow Sea plus a third of the surveyed areas in the Pearl River Mouth basin, in the second the southern South Yellow Sea, the southern part of the Bohai Gulf and waters off Hainan. In all, 43 bidding blocks over 150,000 square kilometres have been put up for bids.

The Sino-British Trade Council expects the future timetable to look something like this:

End June 82 submission of bids.

End Sept/Oct 82 concession awards.

End March 83 completion of additional seismic work (for drilling programmes etc).

August 83 drilling begins.

Pitfalls

This presupposes that negotiations on the contracts go smoothly, but there are pitfalls ahead. China's approach to the offshore industry is more tight-fisted than that of other governments. The earlier contracts with the Japanese and the French stipulated development costs to be shared (51 per cent China and 49 per cent to the foreign partner) but the Chinese claimed they had already put in their share as they had done the seismic work and were supplying rigs and equipment.

The regulations announced in February maintain the same principle, chiefly allotting the expense and risk to the foreigner and the control of exploration, development, production and marketing to the CNOOC. They also offer other unwelcome food for thought, requiring foreign operators to give preference to

Chinese personnel, design work, equipment, materials and services.

While this is subject to competitiveness, U.S. companies fear that it may land them in a minefield of bureaucratic hassle and delay. They are sceptical, the Washington-based China Business Review said in its March-April issue, that the Chinese can meet delivery commitments.

Furthermore, "the prospect of leasing a (Chinese) rig, even a modern imported rig, is less than enticing to exploration companies." Chinese crews are inexperienced and Chinese shore services, though now burgeoning, are still minimal.

The February regulations do not mention the carve-up of oil. This will presumably appear in the sample contracts. For the record, in the three earlier agreements, the first 15 per cent went to costs, the next 42.5 per cent to China, and the last 42.5 per cent was split between the foreign partner and sale on the world market.

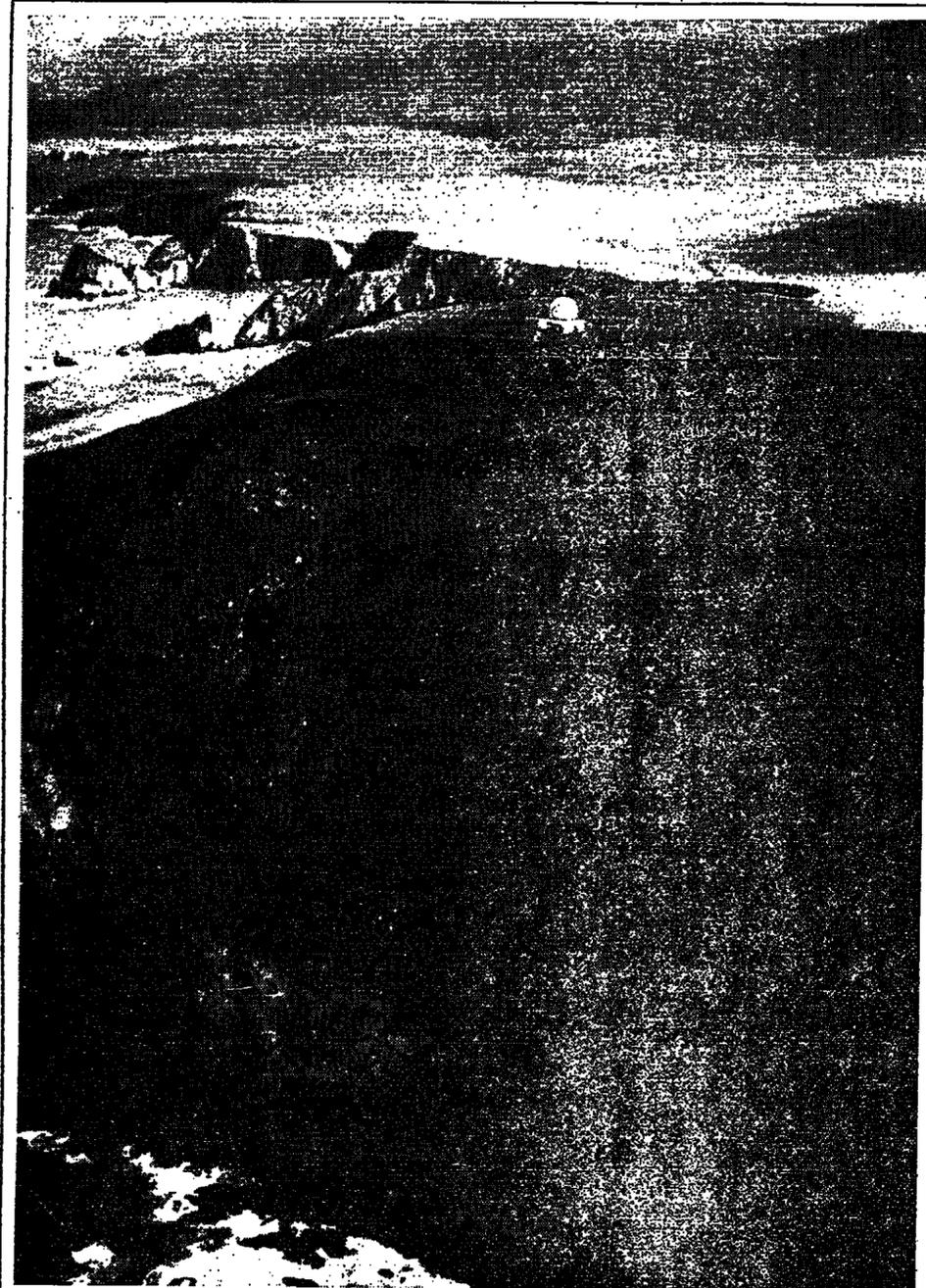
As Mr Emmett Humble, president of Esso Exploration, told the Financial Times last month, there are still many uncertainties and much depends on the terms of the final contract.

Colin MacDougall



China badly needs the oil that offshore development could bring. Production onshore is down from a peak of 106m tonnes in 1979 to a plateau of around 100m tonnes a year. This output may sink further as onshore fields are exhausted.

Key: CNOOC, Japan and China Oil Development Co; SNEA, Societa Nazionale Elf-Aquitaine; CFP, Compagnie des Petroles France.



New electronic bird watcher scans North Sea air traffic.

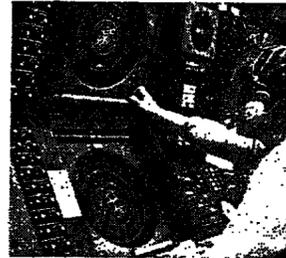
Who would expect air traffic to be much of a problem anywhere near this lonely headland in the Shetland Islands, far to the north of Scotland?

The reason is simple. Oil. The Shetlands, once better known for sweaters and sheep dogs, are just a hop by helicopter from North Sea oil fields. It's not surprising, then, to find a sophisticated radar system in use keeping busy whirlybird air traffic safely under control.

Inside the cocoon-like shelter shown in the photo (left) is the antenna of such a system, designed and built by Cossor Electronics Limited for the U.K. Civil Aviation Authority. At the airport nearby, controllers use Cossor displays to monitor approaching and departing air traffic.

This is just one of hundreds of similar radar systems that Cossor, a Raytheon company, has

supplied for use at airports around the world—and just one part of Raytheon's widespread involvement in air traffic control.



Raytheon has recently completed a fully integrated air traffic control system for the Federal Republic of Germany. In the United States, we have long been a supplier of radars, automated displays, and computer systems for the enroute air traffic control network.

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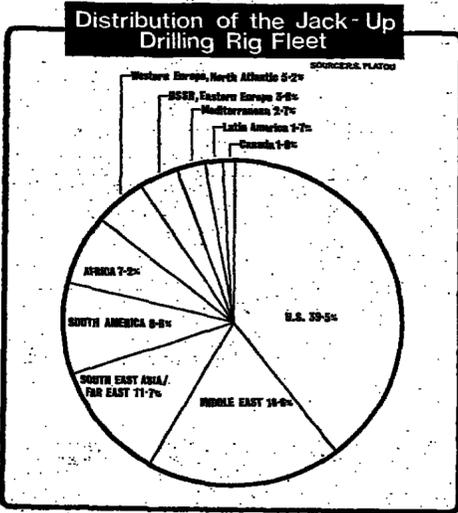
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INTERNATIONAL OFFSHORE TECHNOLOGY III

Subsea production systems have played a key role in the development of marginal oil fields



The international jack-up drilling rig fleet enjoyed 100 per cent employment last year, apart from March and December when percentages were 99.6 and 99.7 respectively

Shell-Esso leads the way with new system

IF SUBSEA completions have opened the door to the development of marginal oil fields in deep water, the Shell-Esso group's Underwater Manifold Centre may have wrenched it right out of its frame.

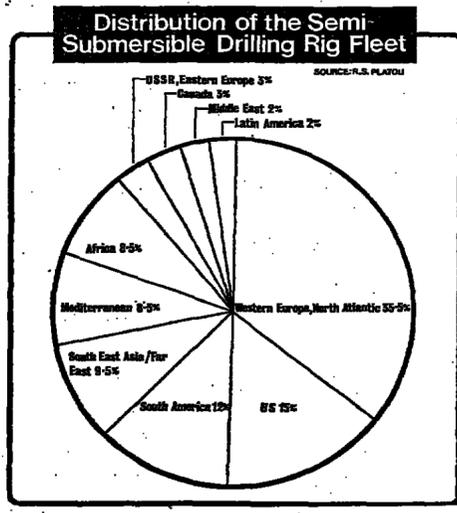
The UMC, to be installed next month on the UK North Sea Central Cormorant field, is the most advanced subsea production system yet built. It can perform production and water injection functions from nine wells on remote control commands sent from the Cormorant "A" platform. The subsea completions themselves are sophisticated units with through flowline (TFL) servicing, which enables tools to be pumped to the wells through pipelines, rather than lowered by wireline from a semi-submersible.

Maintenance and inspection will be performed by an unmanned manipulator, lowered from a support vessel to a rack railway on the UMC, avoiding the need for divers.

Although the Central Cormorant UMC will be installed in just 490 ft of water, it is built to operate in water depths of up to 2,000 ft. Without major design changes it could function at a depth of 4,000 ft. Shell believes the UMC could also be used for fields in relatively shallow water, which are too small to justify the cost of conventional platforms.

Profitable

Simple subsea systems, such as the one pioneered by Hamilton Brothers on its small Argyl field in the UK North Sea, have proved effective and profitable. Commissioned in 1975, Argyl uses satellite subsea completions that produce via a rudimentary manifold to a floating production facility. Versions of the Argyl system have been used around the



world to develop fields in moderate water depths.

In deeper waters, oil companies have "souped up" their subsea systems. But not to any great extent. The Eschova field, in 625 ft of water off Brazil, has been produced with simple wireline-serviced, diver-assisted trees.

Similar equipment is now being installed on Shell Turin's Tazerka field, in up to 800 ft of water off Tunisia—the deepest field yet being developed with subsea techniques. This field uses a single anchor leg system (SALS) to transfer oil to a tanker, which provides process and storage facilities.

Tazerka's record will be broken later this year when subsea completions are installed in up to 900 ft of water on Petrobras' Corvina field, in the Campos Basin off Brazil. Again, the completions will be wet, wireline-serviced trees requiring some diver assistance.

Those in the subsea business believe that the more sophisticated concepts, such as TFL and one-atmosphere completions, will find greater use as development projects move into water 1,000 ft deep and beyond.

Although most companies have some experience with TFL completions, it has not all been good. Many TFL trees have been dogged with operational problems leading to lengthy

periods of downtime. But it is no coincidence that the company which has invested most cash in TFL research and development, Shell, has achieved the best results. BP is another company that is starting to invest heavily in TFL techniques.

In parallel with development of subsea techniques, the oil industry has been working on a range of floating production systems to provide processing and storage facilities for the subsea well streams. Until now it has used either semi-submersibles or tankers, most of them specially converted from their conventional roles.

At the end of last year, there were 14 reservoirs worldwide being exploited with field-wide subsea systems. Eight were being produced via a semi-submersible and six via a tanker. In waters over about 1,000 ft, these systems may be superseded by tension leg platforms, articulated towers and dynamically positioned vessels.

Certainly, the industry is not yet ready to contemplate isolated subsea production systems without some variety of support installation above the waterline. As one oil company executive said: "We like to keep some real estate in the air."

Jim Joseph

The rig building sector Business is booming

THE OFFSHORE rig building business has broken out of its late 1970s lull and is now booming. However, some experts feel that the market could be too successful for its own good. The question is whether there will be enough work for all the rigs now under construction.

Since the present orders were placed, oil prices have begun to come down sharply. Where they will go over the next few years is anyone's guess — although they are not widely expected to notch up the steady increases that consumers have become used to since the 1973 oil crisis.

To build a fully equipped semi-submersible rig able to work in the harsh conditions of the North Sea costs more than \$100m, compared with \$40m, or so in 1974. The price has shot up sharply since the late 1970s, as it has for jack-up rigs, now costing somewhere near \$50m against less than \$30m up to 1979.

At the start of this year, there were 52 semi-submersibles on order around the world. As the total fleet at the end of last year was 120, the expansion over the next two years will be startling. The same will be true of jack-ups, where the order book totalled 148 and the actual fleet was 305.

The figures were compiled by R. S. Platou, a leading firm of Norwegian shipbrokers, in its weighty annual review of the world's shipping and offshore scene. It asked pointedly "whether offshore exploratory activity will increase sufficiently to absorb this growth in the rig fleet."

If the present semi-submersible fleet and the extra rigs due to enter the market this and next are to be fully employed, demand for them will have to rise by more than 19 per cent a year, Platou said.

Because of the increase in rig supply, however, oil companies appear to be expecting pressure on the market to ease and rig owners are now finding it harder to obtain long-term contracts, even at unchanged rates.

Daily chartering rates for semis exceeded \$80,000 throughout 1981 after coming up sharply during 1980. At the start of 1980 they were below \$40,000. According to Platou, rates for new 300-ft cantilever jack-ups of the conventional type, were between \$45,000 and \$50,000 a day; those built to withstand tough North Sea conditions fetched up to \$65,000.

Demand was high enough last year to keep all rigs in use and maintain rates at a high level. Oil companies had to accept contracts lasting for up to five years in order to obtain rigs for their short-term needs. But near the end of the year, the market was beginning to wear thin. Contractual terms had fallen back to two years and rates were easing. For a large number of the rigs on order, no contracts have as yet been signed.

Africa, Canada, China and Australia are all thought to have large offshore oil and gas reserves and could prove to be major markets in future.

On the jack-up side, the U.S. ranks first in importance, employing nearly 40 per cent of the fleet. Almost 19 per cent is in use in the Middle East, other significant areas again being Asia, South America and Africa. While daily rates were at top levels last year, some orders were already cancelled in the first quarter as the market felt the new order book looked too indigestible.

Platou reckoned that demand for jack-ups would have to go up at an annual rate of nearly 35 per cent over the next 18 months to use up all the capacity.

"If the oil companies fail to step up their exploration activity to ensure that the demand for jack-ups would rise at the above rate, the result would be a surplus on the market in the course of 1982 with a corresponding drop in rates," according to the shipbrokers.

Weaker market

Not surprisingly, therefore, Platou concluded that the rig market would weaken slightly during the next few years.

For the expanding fleet to be fully used, exploration will need to be stepped up. But with oil prices likely to ease in real terms after taking account of inflation, such a boost in activity does not seem to be on the cards.

None of this will come as particularly welcome news to the world's rig builders, many of which have switched over to varying extents from the depressed shipbuilding business, itself a casualty of the oil crisis.

In line with their huge capacity in shipbuilding, Japanese and South Korean concerns have moved heavily into offshore work.

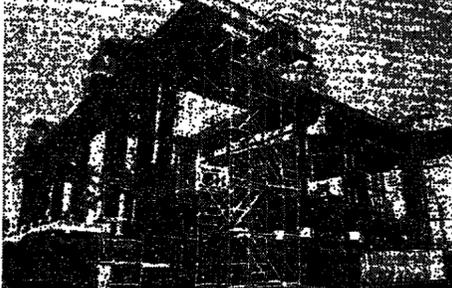
Some way behind Far Eastern builders of semi-submersibles come European yards, with British Shipbuilders now eager to win more orders after letting the market get away from it in previous years.

The U.S. leads in the construction of jack-up rigs, with most of the building carried out in the U.S. Gulf. Asian yards are also heavily engaged on the jack-up side, with Singapore a strong force. In Europe, France is the main jack-up builder.

For all rig constructors, the safety element has become of prime importance in the light of major disasters. Earlier this year, British Shipbuilders announced a new \$50m semi-submersible design with which it hopes to jump right into the advanced end of the market. The new BS 5000 DP design is said to meet all the latest safety regulations drawn up by various countries and can be used in such hazardous oceans as the Atlantic off Canada's eastern coast and the North Sea.

Along with other rig builders, ES has an eye on the demand which the expansion of drilling in the more northern latitudes of the sea off Norway should open up.

Andrew Fisher



The 2,200-tonne structure of the Underwater Manifold Centre for the Central Cormorant Field.

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4. British Gas Morecambe Bay. Compressor installations for offshore platforms plus onshore facilities.
5. Mitsui/Maersk. Rotary screws for jack-up platform application.
6. McDermott/Esso, Norwegian sector, Odin field. Rotary screw installation.
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TOTAL OIL RIG FLEET	On order				
	1978	1979	1980	1981	Dec 1981
Semi-submersible rigs	116	111	116	120	52
Jack-up rigs	163	196	223	305	146
Drillships/deepwater barges	60	56	52	53	4
Total	344	363	391	478	202

Source: R. S. Platou.

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INTERNATIONAL OFFSHORE TECHNOLOGY IV

Declining North Sea activity slows improvements in design. Martin Dickson explains

Platform development needs a boost

THE TECHNOLOGY of the world's offshore oil and gas platforms is going through an exciting era of change. As the hunt for hydrocarbons goes into ever deeper and more hostile waters, the fixed production platforms which have always dominated the offshore industry are giving way to a new generation of floating platforms and seabed structures of widely differing designs.

The testing ground for many of these revolutionary new ideas is the North Sea. However, a substantial slowdown in the pace of North Sea development means that the move from design board to commercial operation could be slower than analysts were expecting a year or so ago.

Falling real oil prices plus the UK Government's tax policies have made several oil companies have second thoughts about pressing ahead with new North Sea fields.

The result is a dearth of orders for new platforms — both conventional fixed ones and new floating varieties. In recent weeks UK companies building either the "inset" (substructure) of North Sea platforms or the modular equipment which sits on top have issued statutory precautionary 90-day redundancy notices to more than 2,000 workers.

The offshore construction industry has warned that many more of its 25,000 workforce could lose their jobs unless orders for platforms and related equipment are placed by the end of the year.

Hopes of new orders in the near future are pinned largely on three groups: British Gas, which is expected to begin ordering platforms shortly for its Elba-Moresambé gas field in the Irish Sea; The British National Oil Corporation, which is drawing up plans for the

development of its Clyde oil field; Marathon, which is planning a second platform for Brae; and Total/Elf, which is considering the development of its Alwyn oil and gas find.

The position in the North Sea reflects a worldwide trend, as a construction boom in 1980-81 starts tailing off. According to Merrill Lynch's Monthly Petroleum Review the number of platforms under construction around the world stood at 230 last December. This was still slightly above the 224 recorded in the same month of 1980, but down from a high of 236 reached in June last year.

Furthermore, only 400 platforms were in the design or planning stage last December, compared to 521 at the same point in 1980.

Amid the development of floating production systems, the technology behind the fixed steel platforms which dominate the offshore industry has been progressing also.

landmark was reached last month when British Petroleum installed the jacket for its Magnus field. The 40,000 tonne monster is the largest steel structure installed in the North Sea. It stands in 600 feet of water, the greatest depth for a North Sea platform.

The records set by Magnus are unlikely to be beaten, for in fields of such depth the trend is now towards floating production systems.

Indeed, BP did consider using a floating system — the so-called Tethered Buoyant Platform — for the development of Magnus but at the time the investment decision was made in 1978 this option was considered more expensive.

BP's tethered buoyant platform, which has yet to get off the drawing boards, is similar to the so-called tension leg platform (TLP) being developed by Conoco for use in the North Sea's Hutton field.

The structure floats on the surface and is tethered in position above the oilfield by a series of tensed steel cables, running from seabed templates to the four corners of the platform's hull.

The advantages of floating production systems generally are that they can be used in very deep waters whereas fixed platforms are limited to about 1,000 ft of water, and that they can be moved from field to field, making the economics of smaller offshore oil accumulations more attractive.

A specific advantage claimed for the TLP over rival floating systems is that the tension legs largely suppress heavy pitch and roll motions.

The Hutton platform is being built in Scotland, with McDermott's Ardrosser yard making the deck and the Nigg Bay yard of Highlands Fabricators the hull section.

Conoco says the TLP will be capable of operating in water depths of up to 2,000 ft. However, for its commercial application in Hutton it will only be in 485 ft of water, with the field being used as a testing ground.

Swops

BP, meanwhile, is pressing ahead with the development of a floating production system resembling an oil tanker. Called the single well oil production system (Swops), the vessel would be used to exploit small fields or test the production capabilities of large reservoirs.

Shaped like a ship, the Swops vessel would have a retractable riser pipe—a proboscis-like tube—which would be connected to an oil field well head located on the seabed.

Oil would pass up the riser to the vessel, where it would be processed and stored. Associated natural gas, stripped from the oil, would be used to power the ship's operating system.

When the vessel's tanks were full the riser would be withdrawn and the Swops would sail to the nearest oil port to discharge.

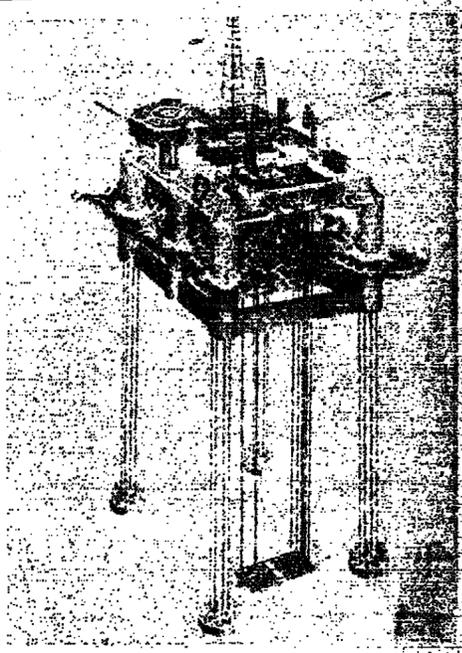
BP recently awarded a design contract for the vessel to a British Shipbuilders subsidiary, VO Offshore of Barrow-in-Furness, Cumbria. The work, involving the design of the ship and its main propulsion machinery, is expected to be completed late this year.

Alongside the development of floating systems, the oil industry is also directing much research into so-called "subsea completions"—locating well control mechanisms directly on the seabed, controlled electronically from the surface.

The most dramatic of these innovations—discussed more fully in another article in this survey—is Shell-Esso's Underwater Manifold Centre, due to be installed in the North Sea Comorant field.

When the Shell system was

unveiled late last year it prompted Mr Jan Memelink, the company's technical director for UK exploration and production, to declare: "The deep sea, just as much as deep space, is an environment where man is alien and where his technology will be stretched to the maximum." The sentiment applies to all offshore production systems, be they on the seabed, fixed platforms or floating on the waves.



New tension-leg platform
Conoco's new type of North Sea drilling platform (right) does not rest on the sea bed but is tethered and semi-submerged using a "tension-leg" concept which may be used for oil production at depths down to 2,000 ft

Deeper waters

Design changes have permitted their use in ever deeper waters. Last year Union Oil installed the 20,000 tonne steel jacket for its Cerveza field, in the Gulf of Mexico, in 925 ft of water — the tallest platform installed in one piece. The tallest fixed platform ever built is in Shell's Cognac field, also in the Gulf of Mexico, which was installed in three pieces and stands in 1,026 feet.

A further innovation in the Gulf of Mexico is the "guyed tower" being developed for Exxon's Lena field. Standing in 1,000 feet of water, this will be a slender steel structure which is given stability by radiating guy-lines, which allow it to move slightly in response to wind and water.

In the North Sea, an historical

structure floats on the surface and is tethered in position above the oilfield by a series of tensed steel cables, running from seabed templates to the four corners of the platform's hull.

The advantages of floating production systems generally are that they can be used in very deep waters whereas fixed platforms are limited to about 1,000 ft of water, and that they can be moved from field to field, making the economics of smaller offshore oil accumulations more attractive.

A specific advantage claimed for the TLP over rival floating systems is that the tension legs largely suppress heavy pitch and roll motions.

The Hutton platform is being built in Scotland, with McDermott's Ardrosser yard making the deck and the Nigg Bay yard of Highlands Fabricators the hull section.

Bright outlook for chemicals used in drilling

Mud is big business

MUD MAY NOT sound big business but the big expansion in oil and gas drilling activities worldwide over the past few years has spelt boom times for manufacturers of "mud," the chemicals used during the drilling of a well.

The international mud market is estimated to have grown by more than 20 per cent a year in value terms for the last six years and is now worth \$3bn a year. The downturn in the oil market will take some of the glitter off this record, but the medium-term outlook remains bright.

The oil and gas industry is having to drill ever deeper into the earth's surface to find hydrocarbons and that means a much greater use of mud per well.

Mud is pumped down a well through and around the edges of the drill bit. It returns to the surface again in the gap between the side of the well and the drillstring (the piping which turns the bit).

It has several key functions. First, it lubricates and cools the bit. Second, it flushes out the chippings of rock which result from drilling and it brings them to the surface. There the chippings are filtered out so that the mud can be used again.

The chippings are useful for getting information about the geology being penetrated and hydrocarbons in the mud can give the first clue that oil and gas has been struck.

Thirdly, the mud lines the

Joint ventures

These companies together represent about 75 per cent of world sales, and additional joint ventures mean they probably have a share in 90 per cent of the market. Nevertheless, there are a substantial number of small, independent suppliers.

In the UK these include companies such as International Drilling Fluids, a subsidiary of English China Clays, and BW Mud, part of the KCA International group.

The biggest single market for mud is the U.S., which accounts for about 65 per cent of world sales. A substantial rise on the 52 per cent recorded in 1975. U.S. sales have been growing faster than world sales as a whole because of a tremendous upsurge in U.S. drilling activity.

Mud costs rise exponentially as a well increases in depth. From 5,000-7,500 ft mud costs around \$4 a foot, from 7,500 to 10,000 some \$10 a foot and from 10,000 to 15,000 feet around

When the vessel's tanks were full the riser would be withdrawn and the Swops would sail to the nearest oil port to discharge.

BP recently awarded a design contract for the vessel to a British Shipbuilders subsidiary, VO Offshore of Barrow-in-Furness, Cumbria. The work, involving the design of the ship and its main propulsion machinery, is expected to be completed late this year.

Alongside the development of floating systems, the oil industry is also directing much research into so-called "subsea completions"—locating well control mechanisms directly on the seabed, controlled electronically from the surface.

The most dramatic of these innovations—discussed more fully in another article in this survey—is Shell-Esso's Underwater Manifold Centre, due to be installed in the North Sea Comorant field.

When the Shell system was

Changes are being proposed both in the equipment and in procedure. At the Wolfson Microelectronics Institute in Edinburgh, work has begun on a new device to unscramble the "Donald Duck" type voices of divers when they breath helium enriched air.

Intense cold is another menace to divers especially if they are waiting to be freed from a crippled bell.

Propane heaters already exist, but are unsuitable at extreme depths. American Navy scientists are working on a hydrogen-fuelled heater, providing two kilowatts of heat for up to 6 hours, at depths of 450 ft. The heat is provided in a small tank and pumped through the diver's suit.

Another change in practice which, it is claimed could lessen the risk for divers, would force operators of support ships to carry only pre-mixed cylinders of helium and oxygen. This follows claims that some North Sea divers have died as a result of accidentally being given pure helium, instead of the right helium-oxygen mixture.

The oil industry is also intensifying research into the many environments which offshore structures have to withstand.

In the U.S. some 15 international oil companies are helping to finance a \$1.5 million programme by the Battelle Institute at Columbus, Ohio, into how satellites can monitor the behaviour of the oceans.

Figures from the U.S. Government in the mid-1970s suggest that remote satellite sensing systems could have saved oil producers millions of dollars in drilling operations in the Gulf of Alaska alone. This is another graphic example of where safety interests coincide with commercial areas.

"The Other Price of Britain's Oil" by W. G. Carson, published by Martin Robertson, Oxford.

Parallels

As Dr. Ljunding made clear at the UKOAA conference, not everyone complacently agrees that the oil industry has had a remarkable good record. In a recent book, Mr Kit Carson, senior law lecturer at Edinburgh University, said there were "extraordinary parallels" between safety efforts in the North Sea and the "earlier efforts to impose statutory control upon the operations of the dark satanic mills of the 18th century."

In the rush to bring gas and oil ashore, he claimed, safety had become "a rather poor second," he says.

He is strongly against leaving safety to the oil operators and the Energy Department. Instead, he wants it to be transferred to the Health and Safety Executive of the Department of Employment.

In the meantime, the charge that too many lives are being sacrificed for oil encounters the argument that safety is observed because it is essential for the oil companies' profitability.

When one turns from this controversy to enumerate some of the developments in technology and practice, one is impressed by the overwhelming importance of safety.

In diving, for example,

Martin Dickson

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Bringing commercial and safety needs closer

IN THE first 17 years of Britain's offshore oil industry, a series of disasters and spectacular rescues has grimly demonstrated that North Sea oil's price is measured in human lives as well as dollars.

But it is only now, as the industry moves more slowly into the harsher North Sea regions, that the question of safety is beginning to overshadow the novelty of the oil bonanza in the public mind.

A similar change of mood appears to be taking place within the industry itself, judging by some of the remarks made at a recent national conference on UK offshore safety.

Dr Matt Ljunding, a former managing director of BP Petroleum Developments and one time head of its North Sea operations, complained that the conference sponsored by the UK Offshore Operators' Association was the first of its kind and that the industry had taken 17 years to come together to discuss safety.

While all speakers at the conference agreed that complacency was the prime enemy of safety, there were disagreements about the degree to which standards should be enforced by tighter legislation. Union representatives, in particular, stressed the need for a greater Government role. Other speakers complained that, in some ways, UK safety standards appeared less stringent than those of Norway. There is indeed a steadily growing wake of UK legislation about operating procedures. But, so far, the speed with which the industry has developed has made it difficult for legislation to keep up with changing technologies.

Instead, oil companies prefer a system of self regulation in agreement with the Energy Department. This means the companies set their own standards of safety, which are open for inspection, and subject to official approval.

The Government, too, is happy with this formula which is likely to continue until the

distant day when offshore oil production is a mature industry — or unless it suffers a disaster, greater than any it has yet experienced.

Two of the more serious recent disasters were outside British waters—the death of 123 men when the Alexander L. Keilland, a Norwegian accommodation platform, capsized two years ago, and the explosion in January of the Ocean Ranger rig, off Newfoundland, with the death of 84 men.

In the British North Sea, 13 men died in a helicopter crash last year; and two divers died, two years ago, in a stricken diving bell in the Thistle field.

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Maurice Samuelson

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INTERNATIONAL OFFSHORE TECHNOLOGY V

New ways of moving oil from sea to shore

TO MOVE oil from sea to shore is a complicated and costly business. The ambitious new Louisiana Offshore Oil Port (LOOP) cost around \$700m, while the bold plan for submarine gas tankers put forward last year by General Dynamics of the U.S. would run away with many billions of dollars if ever implemented.

LOOP began operating late in 1981, but will not really be running at full stretch until around the middle of this year. Located about 19 miles off the Louisiana coast, it is the first port in the U.S. which can discharge fully laden VLCCs and ULCCs (very large and ultra large crude carriers).

Eventually, LOOP will link up with about 30 per cent of U.S. refining capacity. Its first shipment of 1.5m barrels of light Arabian crude came from the 270,000 deadweight ton Texaco Caribbean which had loaded the oil at a similar kind of facility in the Gulf.

Around 330 tankers are expected to call at LOOP in its first full year from mid-1982.

The advantage of facilities like LOOP is that they cut out much of the awkward transshipment to smaller ships able to negotiate inland and coastal waters.

As well as its 19 miles of offshore pipelines, LOOP has another 28 miles running

through the marshland between the shoreline and the Cleveley Salt Dome where crude oil is temporarily stored.

By the end of this year, all eight of the salt dome cavities should be available for storage. The oil is expected to come from Saudi Arabia, Nigeria, Kuwait, Egypt, Qatar, Abu Dhabi, Algeria, Oman, Libya and the North Sea. During LOOP's first stage daily throughput is around 1.4m barrels. Roughly half will go to refineries in Louisiana and the rest to the midwest and Texas.

LOOP has three single buoy moorings (SBMs) laid in an arc around the central control and pumping platform. There will eventually be six such SBMs. The shareholders in LOOP are Texaco with 26.6 per cent, Ashland Oil (18.6 per cent), Marathon Pipe Line Company (32.1 per cent), Murphy Oil (3.2 per cent) and Shell (19.5 per cent).

SBMs have been around for over 20 years, the first three being installed in 1958—two at Miri in Borneo and one in Sweden. But LOOP is the first significant SBM installation in the U.S.

Captain James Middleton, operations manager for Marathon Marine, said in a recent article that the concept required advanced engineering expertise, especially in fool-proof swivel joints for the

cargo hoses and in under-water maintenance.

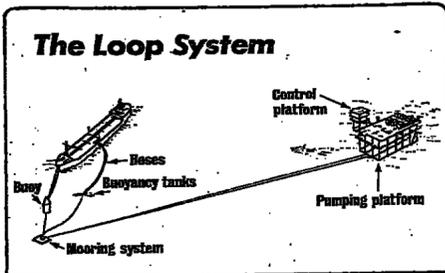
In areas like Japan, South Korea and the Middle East, SBMs have become fairly common, he wrote in the magazine of International Ship Suppliers Association. Since the U.S. has no ports which can take supertankers—New Orleans, for example, has a maximum 40ft draft against large tanker drafts of 60ft and well over LOOP was an obvious project, though it was nearly ten years before the first oil was discharged last May.

Other deep water offshore ports have been proposed off the southern and western coasts of the U.S., but LOOP is the only one to have actually been built.

Another such port—the Texas Offshore Port (TOP)—is being considered 12 miles off Freeport, Texas, at a possible cost of over \$190m, while Coastal Corporation has a plan for a Gulf Coast Transshipment Terminal (GTT) which would probably cost only \$30m and could be in operation within a year.

In its World Tanker Fleet Review, shipbroking company John I. Jacobs said there was "an uneasy feeling" in the U.S. that some long overdue port developments could be inhibited by high interest rates.

But the Port Authority of New York and New Jersey has authorised a feasibility study for an oil terminal on Staten Island with a pipeline link to the Arthur Kill refineries; this could cost around \$170m and be ready in 1986.



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Last summer saw the starting-up of a major offshore facility at the Yasbu terminal in Saudi Arabia on the Red Sea, which takes oil transported across the country by pipeline from the country's eastern oilfields. Construction began in 1977 and was finished last July within the \$1.6bn budget.

The current throughput is around 1.85m barrels a day, with a potential for expansion up to 3.7m. By taking the oil across the country instead of going around the

peninsula to European and American markets, some 2,000 miles can be saved.

Taking an almost science fiction view of the future, the idea of using submarine tankers put forward by General Dynamics would involve an outlay of some \$17.5bn for 17 non-nuclear facilities or a not much more modest \$15.6bn for 14 nuclear vessels.

The audacious plan would be to transport natural gas from the Arctic under the ice to European markets. Putting such a plan into effect, however, is likely to require more than vision alone.

Andrew Fisher

HELICOPTER FLEETS

A race to meet stringent demands

WITHOUT the helicopter, the development of North Sea oil and gas fields, and other offshore fields around the world, would either have taken much longer or would have been much more expensive. The unique capability of the helicopter to land and take-off almost vertically in confined spaces has made it the ideal vehicle for regular communications and supply duties between the mainland and rigs and platforms often several hundred miles out to sea.

As a result, there are now several hundred helicopters of various types engaged in offshore support operations throughout the world. Most of the 30 or so regular helicopter operators in the UK are involved in support work for the oil and gas industries in one way or another—although not all of them, because of the size of the aircraft they operate, actually fly between the mainland and the rigs. That task is handled by those with the larger machines.

In 1981, more than 650,000 passengers were carried by helicopter from UK mainland points, such as Aberdeen, Stirling, Teesside and Ullapool, to the various rigs and platforms in the North Sea—and the figure is rising steadily each year.

It is estimated that there are more than 2,500 rigs and platforms involved in the offshore petroleum industry world-wide, requiring the transport of more than 50,000 people every week between them and the mainland—and that is in addition to the carriage of stores and equipment. Without the direct use of a large fleet of helicopters, the development of the petroleum industry would not have been as dramatic as it has been in the past two decades.

The biggest operator in the world, Petroleum Helicopters of the U.S., has more than 250 aircraft, most of them involved in the oil industry in one way or another. In the UK, the biggest operator is Bristow Helicopters, with over 70 aircraft in service, on order or in process of



The new Westland 30 helicopter on a gas production rig in the North Sea.

delivery, including some of the latest twin-engine turboprop-powered aircraft such as the French Aerospatiale Super Puma, called the Tiger by Bristow. The next largest operator is British Airways Helicopters, with a fleet of nearly 40 aircraft, including the biggest passenger helicopter yet built, the new Boeing Vertol 224, a commercial derivative of the military twin-turbine engine, twin-rotor Chinook.

Behind these, excluding private or company aircraft, there are over 30 more regular operators of varying sizes, down to the smallest one-aircraft operator, all of whom are able in one way or another to support the oil industry as well as undertake other types of work.

Hand-in-hand

The development of the offshore oil industry and of the helicopter has gone hand in hand. As the growth of the oil industry's activities has been accelerated by the use of rotary-winged aircraft, so the stringent demands made by the oil industry have in turn forced the pace of technological development in helicopters. There have been steady demands, for example, for increased range and payload capabilities, leading to increased aircraft sizes. These in turn, have generated a demand for improved engine reliability and for better fuel consumption, while the harsh operating environment has led to improvements to the reliability of components, such as rotor blades and transmission systems, and especially improved resistance to corrosion.

At the same time, the steady search for new materials has resulted in greater use of composites in helicopter manufacture, helping to save weight which in turn has helped to improve range and payload performance even more. As a result of these developments, the entire helicopter manufacturing

industry has benefited, and rotopropelled craft as a whole are now more rugged, reliable and cost-effective than ever before.

This two-way stimulation of development is likely to continue through the 1980s, as the demand for crude oil generates exploration in even remote areas further from the mainland, increasing helicopters of even greater range and payload capacities. So far, the biggest helicopter used offshore is the Boeing Vertol 224. British Airways Helicopters is buying six of these aircraft. Three are already in service, linking Aberdeen directly with the Orkney Islands, and also serving other parts of the North Sea. More are due to come into service in the next few months, and the sixth aircraft is due in service this summer. Charles W. Ellis, Boeing Vertol's vice-president

business operations and helicopter programme manager, says that in the first six months of BA's operations with the Boeing 224 in the North Sea, more than 36,000 passengers were carried, with an average round-trip flight of about 45 hours. Load factors have been very high, and punctuality and reliability are now very good, after some initial teething difficulties.

One feature of the development of the helicopter for offshore duties is that the aircraft generally used are twin-turbine powered, for greater reliability. The long-standing workhorse of the industry, the 26-30 seat Sikorsky S-61N, is twin-engine, and all the other aircraft that have followed have adopted the same concept of two-engined safety, including, for example, the latest types such as the 12-14 seat Sikorsky S-76, the 20-22 seat Aerospatiale Super Puma, the Boeing 224 and the latest arrival on the scene, the Westland 30, 16-seater, which entered service with British Airways Helicopters earlier this year.

Michael Donne

Advances in microwave and satellite links

THE communications requirements of the offshore oil industry are extremely complex. Information about oil production has to be sent daily to land-based terminals, as well as requests for supplies and helicopter services to ferry men and materials between platform and shore.

Increasingly, platforms are equipped with computers to monitor conditions and to control the flow of oil and gas. Computers are constantly measuring and relaying information vital to the smooth running of the industry.

Maritime forms of communications have been based traditionally on radio. Most of the telecommunications authorities of maritime nations operate emergency long-distance links with the shore, mainly for ships in distress.

The facility, however, is not able to cope with all the day-to-day needs of the offshore

oil industry, and other more sophisticated methods of communication such as satellites and microwave radio, are being increasingly used. As the cost of satellites is falling, so their use is likely to increase. Phillips Petroleum, for example has its own satellite channel to serve one of its North Sea platforms.

Another technique, based on microwave radio, has been pioneered by British Telecom and Marconi, part of the GEC group.

It is called tropospheric scatter, and tries to overcome the drawback of microwaves which normally have a transmission range extending only as far as the horizon. However, they are capable of carrying vast amounts of information necessary to control the day to day operation of an oil platform.

If platforms are relatively close to land, then large

amounts of information can be carried by high capacity microwave systems. Microwaves are high frequency radio waves and are used in the southern most parts of the North Sea, for example, and anywhere where the platforms are within sight of land.

Longer range

Tropospheric scatter allows engineers to increase the range of microwave transmission from about 30 miles to about 400 miles which can then reach the majority of platforms in the central and northern parts of the North Sea, well out of sight from shore.

Its principle is that very powerful microwaves are projected upwards towards the horizon in a narrow beam in the direction of the platform from the shore transmitter, or vice versa. Ever-present turbulence in the earth atmosphere, the

troposphere, scatters the beam—just as a car's headlights can be seen at night even when the car itself is out of sight over a hill.

While most of the power of the beam is lost, sufficient remains in the scattered beam to be picked up by the very sensitive receiving aerials far beyond the horizon. Compared with the original signal the scattered beam is one thousand trillion times smaller.

British Telecom inaugurated its tropospheric scatter system in the North Sea in 1976. Mobil's Beryl Alpha was the first to be provided with an automatic telephone service using it.

In order to serve the North Sea, British Telecom built two special microwave land stations. One at Mornmond Hill in north-east Scotland, while the second is at Scotsburgh on South Shetland, to link the most northern platforms.

Elsewhere, the potential for

growth in satellite communications is highlighted by the fact that, earlier this year, the International Maritime Satellite Organisation, Inmarsat, started operation of its system to improve contact between ships and landbases to replace the U.S. Marisat system which has been operating for several years.

Equally, it is possible for the offshore oil industry to use the system especially for its supply ships with link to both home base and platforms whatever the distance.

The first of the new Marisat satellites, operated by Inmarsat, was launched in late 1981 to cover the Atlantic with a second planned for the Pacific region. Both satellites are capable of providing the equivalent of 40 telephone channels compared with only 10 channels for the old Marisat systems which is incorporated into the new service until they are replaced with new satellites.

Elaine Williams

McDermott

"We invested over half-a-billion dollars during a down cycle because we predicted today's upturn."

J. E. Cunningham
Chairman of the Board
Chief Executive Officer

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No matter how the world solves its energy problems, McDermott is involved.

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Table of insurance companies and their products, including Abbey Life Assurance Co. Ltd., Amey Life Assurance Co. Ltd., and others.

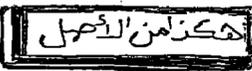
INSURANCE & OVERSEAS MANAGED FUNDS

Main table listing various insurance and managed funds, including Sun Life of Canada (UK) Ltd., Prudential Life Assurance Co. Ltd., and others, with columns for company name, address, and fund details.

OFFSHORE AND OVERSEAS

Table listing offshore and overseas managed funds, including Fidelity International, Sun Alliance Insurance Group, and others.

NOTES
Prices are in pence unless otherwise indicated and those denominated in dollars or pounds refer to U.S. dollars or pounds sterling respectively.



INDUSTRIALS—Continued

Table of industrial stock prices including companies like British Petroleum, Shell, and ICI.

LEISURE—Continued

Table of leisure stock prices including companies like British Airways and British Telecom.

PROPERTY—Continued

Table of property stock prices including companies like British Land and Wimpey.

INVESTMENT TRUSTS—Cont.

Table of investment trust stock prices including various regional and sector funds.

OIL AND GAS—Continued

Table of oil and gas stock prices including companies like BP and Shell.

DAIWA BANK advertisement with contact information for Osaka, London, and Frankfurt.

MINES—Continued

Table of mining stock prices including companies like Anglo American and De Beers.

MOTORS, AIRCRAFT TRADES

Table of motor and aircraft trade stock prices.

NEWSPAPERS, PUBLISHERS

Table of newspaper and publisher stock prices.

PAPER, PRINTING ADVERTISING

Table of paper, printing, and advertising stock prices.

SHIPPING

Table of shipping stock prices.

SHOES AND LEATHER

Table of shoes and leather stock prices.

SOUTH AFRICANS

Table of South African stock prices.

TEXTILES

Table of textile stock prices.

TOBACCO

Table of tobacco stock prices.

TRUSTS, FINANCE, LAND

Table of trusts, finance, and land stock prices.

PROPERTY

Table of property stock prices.

OVERSEAS TRADERS

Table of overseas trader stock prices.

RUBBERS AND SISALS

Table of rubber and sisal stock prices.

TEAS

Table of tea stock prices.

MINES

Table of mining stock prices.

REGIONAL MARKETS

Table of regional market stock prices.

OPTIONS

Table of options stock prices.

INSURANCE

Table of insurance stock prices.

LEISURE

Table of leisure stock prices.

NOTES

Notes section containing various financial notices and announcements.

REGIONAL MARKETS

Regional Markets section listing prices for various regional indices.

OPTIONS

Options section listing prices for various call and put options.



PEDESHAAB LIMITED VIA NOVA DRYING & COATING PLANTS FOR THE CONSTRUCTION INDUSTRY

BL launches bonus drive for trade-in deals

BY KENNETH GOODING, MOTOR INDUSTRY CORRESPONDENT BL IS TO give its dealers bonuses of between £150 and £300 a car in May.

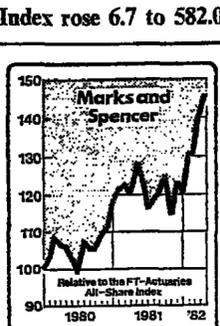
cent compared with the target of 20.22 per cent for 1982. "We won't be panicked into cutting our prices," he insisted.

Ministers back Civil Service pay award

By Elinor Goodman PAY RISES of about 6 per cent for the armed forces and Civil Service are expected to be announced shortly.

THE LEX COLUMN Marks steps up the pace

Pity the competitors of Marks and Spencer. At a time of stagnant retail demand, the stores group has pushed up volume in the UK by 11 per cent—and the rate of gain has been increasing.



quarter pre-tax profit of £52m. Yesterday's figure was £62m, which compares poorly with the £84m ICI made before the exceptional currency gains in the final quarter of last year.

NUR may strike to stop works closures

By Brian Groom, Labour Staff THE NATIONAL Union of Railwaymen faced British Rail yesterday with the threat of strikes if BR went ahead with plans to cut more than 5,000 jobs in 12 engineering workshops.

Midland calls in receiver at Ferguson Lacey trust

BY RAY MAUGHAN MIDLAND BANK has appointed Mr Guy Parsons and Mr Richard Agutter of Peat, Marwick, Mitchell as joint receivers of Birmingham and Midland Counties Trust, the investment holding company controlled by Mr Graham Ferguson Lacey and his long-standing business associate, Mr Cecil McBride.

to finance the takeover. The suit will be heard in the New State Court on Monday, although NCC has already terminated its proposals to pursue the Australian deals.

Index rose 6.7 to 582.0

The performance in the first half was flattered by a relatively weak comparable period in 1980, when pre-tax profits fell by 11 per cent. However, the second six months has maintained the growth momentum, with a profits rise of 21 per cent, even though the same period a year earlier had registered an improvement of 17 per cent.

George Wimpey

The drop in George Wimpey's full year profits was not quite so steep at the interim stage; nevertheless the decline at the pre-tax level is fully 20 per cent to £44.2m.

GUS/Empire

Great Universal Stores has strengthened its hand by picking up another 14.7 per cent of Empire Stores in the market. True to form, it paid most of its own shares and stopped just short of a total holding of 30 per cent—the level at which a full cash alternative to its existing offer would be required.

Mexico's largest company to meet creditors over \$2.3bn debt

BY WILLIAM CHISLETT IN MEXICO CITY GRUPO INDUSTRIAL ALFA, Mexico's largest private sector company, meets its international and domestic creditors in Houston, Texas today, after suspending repayments of principal on its debts of \$2.3bn (£1.3bn).

and that some banks were scrambling to get better terms— to the disadvantage of other banks.

At the same time that banks were informed by telex of the suspension of principal payments, they were also told that Alfa would no longer issue new guarantees.

Weather

UK TODAY CLOUDY but dry in most places with rain in Northern Scotland. Near normal temperatures.

Worldwide

Table with columns for location, y'day, and m'day. Locations include Ajaccio, Algiers, Athens, Bahrain, Beirut, Berlin, Bonn, Buenos Aires, Caracas, Cape Town, Chicago, Colombo, Copenhagen, Corfu, Denver, Dublin, Edinburgh, Faro, Florence, Frankfurt, Geneva, Giza, Graz, Havana, Helsinki, Hong Kong, Innsbruck, Istanbul, Jakarta, London, Lyons, Madrid, Manila, Mexico City, Miami, Moscow, New York, Ottawa, Paris, Perth, Rome, Seoul, Singapore, Stockholm, Sydney, Taipei, Tokyo, Valencia, Warsaw, Wellington, Zurich.

Solidarity

Government a recent statement by the Polish Council on "national accord". This document, produced at the beginning of April by a group of advisers to Archbishop Jozef Glemp, said that the union should drop its overt political ambitions and suggested that Solidarity went too far in its demands last year.

U.S. on peace moves

to call a division at the end of the debate. Mr Tony Benn accused Mrs Thatcher and the Cabinet of losing control of the operation.

Wall St.

the market had been generally more optimistic and had expected some sort of compromise. "The market had built in some expectations of a compromise which would have provided a more optimistic atmosphere," said Mr William Greig of J. Henry Schroder Bank and Trust Company.

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